

LITTELL'S LIVING AGE.

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FADED FLOWERS.

O FADED flowers! so lovely still in death, —
 So fair, so frail, it seems as though a breath,
 A whispering wind, would all your beauty
 mar, —
 How sad, yet O how true, a type ye are
 Of man's fast-fading life and hopes below!
 To my sad heart to-night ye speak, I know,
 Of cherished hopes, that in my youth seemed
 bright,
 But which, like ye, have faded in my sight,
 And drooped, and died, and passed away from
 earth
 With all the joys that in them had their birth.
 And as I gaze upon ye, faded flowers,
 My thoughts fly back to happy bygone hours,
 Until before me rise, as in a dream,
 The forms of those (sweet faded flowers they
 seem)
 Whom in those early days I loved and lost —
 Like flow'rets, killed while in the bud by frost!
 Alas, that in our lives it should be so!
 And yet is it the fate of all below;
 Our hopes must fade, and friends must pass
 away,
 Until we reach "a land of purer day;"
 For there, O faded flowers! they all, like ye,
 Shall bloom afresh, and still more lovely be;
 The hopes we've lost, the loved ones whom we
 mourn,
 More bright and beautiful shall then return,
 And, like sweet everlasting flowers, shall bloom
 In regions where no fading e'er shall come;
 Where friends, and hopes, and flowers shall live
 for aye,
 And "lovely things, and sweet, pass not away."
 Tusley's Magazine.

WHITHER?

ALL spangled are the beech trees, with motes of
 autumn gold,
 And 'neath their spreading red leaves is many
 a love-tale told;
 O'erclouds the sky with shadow, the thunder-
 showers fall,
 And fade away the sunbeams — away beyond
 recall.
 The babbling brook o'er-ripples the pebbles
 smooth and white,
 The water-lilies quiver, and tremble in the
 light;
 Arise the wind and tempest, from whence we
 may not know,
 The brook becomes a torrent, away the lilies
 flow!
 The prisoned lark is stirring his little throat to
 raise
 The song that once on green turf he sang to
 Heaven's praise;

His shrill sweet notes ascending, in melody up-
 rise,
 Re-echoing till their music is lost amid the skies.

Ah! Whither go the gold motes, and where the
 lilies white,
 Borne onward by the torrent resistless from our
 sight?
 And whither goes the brooklet, and where the
 birdie's lay,
 Is it unto that Hereafter, whither all must pass
 away?

All The Year Round.

THE VOICE OF NEMESIS TO THE
REPUBLIC.

THE Empire's dead : in open day
 France scans with dauntless eye her fate.
 But will your nursing freedom stay
 The swift avenger at your gate?

Afield, a traitor's hands were light,
 For bane at home his bonds were strong.
 Your ancient heritage of right
 Is foul with stains of upstart wrong.

You laugh for joy of new-found light,
 For pride of new unfettered force :
 'Tis well : but first in all men's sight
 Come forth and carry out the corse.
 Spectator.

PARIS.

BY S. G. BULFINCH.

"And when the angel stretched out his hand
 upon Jerusalem to destroy it, the Lord repeated
 him of the evil, and said to the angel that destroyed
 the people, It is enough; stay now thine hand."
 [2 Samuel, xxiv. 16.]

DESTROYING angel! when beneath thy sword,
 For David's guilt, his city trembling lay,
 Vengeance to Mercy's gentle plea gave way,
 And thou, majestic servant of the Lord,
 Didst sheathe thy blade at his restraining word.
 Again a monarch's crime hath brought dis-
 may
 To those who bowed beneath his selfish sway.
 O'er France the invaders' countless hosts are
 poured;
 Her brilliant capital beholds them near,
 And, gathering nobler beauty in the hour
 Of peril, bravely waits the impending doom.
 Oh yet again the voice of Mercy hear,
 Nor let the city, of all realms the flower,
 Become her children's and fair Freedom's tomb.
 Cambridge, Oct. 3, 1870. Transcript.

From The Athenæum.

THE ORIGIN OF LIFE.

PROF. HUXLEY'S ADDRESS BEFORE THE BRITISH ASSOCIATION IN LIVERPOOL.

MY LORDS, LADIES, AND GENTLEMEN,

— It has long been the custom for the newly-installed President of the British Association for the Advancement of Science to take advantage of the elevation of the position in which the suffrages of his colleagues had, for the time, placed him, and, casting his eyes around the horizon of the scientific world, to report to them what could be seen from his watch-tower; in what directions the multitudinous divisions of the noble army of the improvers of natural knowledge were marching; what important strongholds of the great enemy of us all, Ignorance, had been recently captured; and, also, with due impartiality, to mark where the advanced posts of science had been driven in, or a long-continued siege had made no progress.

I propose to endeavour to follow this ancient precedent, in a manner suited to the limitations of my knowledge and of my capacity. I shall not presume to attempt a panoramic survey of the world of Science, nor even to give a sketch of what is doing in the one great province of Biology, with some portions of which my ordinary occupations render me familiar. But I shall endeavour to put before you the history of the rise and progress of a single biological doctrine; and I shall try to give some notion of the fruits, both intellectual and practical, which we owe, directly or indirectly, to the working out, by seven generations of patient and laborious investigators, of the thought which arose, more than two centuries ago, in the mind of a sagacious and observant Italian naturalist.

It is a matter of every-day experience that it is difficult to prevent many articles of food from becoming covered with mould; that fruit, sound enough to all appearance, often contains grubs at the core; that meat, left to itself in the air, is apt to putrefy and swarm with maggots. Even ordinary water, if allowed to stand in an open vessel, sooner or later becomes turbid and full of living matter.

The philosophers of antiquity, interrogated as to the cause of these phenomena,

were provided with a ready and a plausible answer. It did not enter their minds even to doubt that these low forms of life were generated in the matters in which they made their appearance. Lucretius, who had drunk deeper of the scientific spirit than any poet of ancient or modern times except Goethe, intends to speak as a philosopher, rather than as a poet, when he writes that "with good reason the earth has gotten the name of mother, since all things are produced out of the earth. And many living creatures, even now, spring out of the earth, taking form by the rains and the heat of the sun." The axiom of ancient science, "that the corruption of one thing is the birth of another," had its popular embodiment in the notion that a seed dies before the young plant springs from it; a belief so wide-spread and so fixed, that Saint Paul appeals to it in one of the most splendid outbursts of his fervid eloquence: — "Thou fool, that which thou sowest is not quickened, except it die." (1 Corinthians, xv. 36.) The proposition that life may, and does, proceed from that which has no life, then, was held alike by the philosophers, the poets, and the people, of the most enlightened nations, eighteen hundred years ago; and it remained the accepted doctrine of learned and unlearned Europe, through the Middle Ages, down even to the seventeenth century.

It is commonly counted among the many merits of our great countryman, Harvey, that he was the first to declare the opposition of fact to venerable authority in this, as in other matters; but I can discover no justification for this wide-spread notion. After careful search through the "*Exercitationes de Generatione*," the most that appears clear to me is, that Harvey believed all animals and plants to spring from what he terms a "*primordium vegetale*," a phrase which may now-a-days be rendered "a vegetative germ"; and this, he says, is "*oviforme*," or "egg-like"; not, he is careful to add, that it necessarily has the shape of an egg, but because it has the constitution and nature of one. That this "*primordium oviforme*" must needs, in all cases, proceed from a living parent is nowhere expressly maintained by Harvey, though such an opinion may be thought to

be implied in one or two passages; while, on the other hand, he does, more than once, use language which is consistent only with a full belief in spontaneous or equivocal generation. In fact, the main concern of Harvey's wonderful little treatise is not with generation, in the physiological sense, at all, but with development; and his great object is the establishment of the doctrine of Epigenesis.

The first distinct enunciation of the hypothesis that all living matter has sprung from pre-existing living matter, came from a contemporary, though a junior, of Harvey, a native of that country, fertile in men great in all departments of human activity, which was to intellectual Europe, in the sixteenth and seventeenth centuries, what Germany is in the nineteenth. It was in Italy, and from Italian teachers, that Harvey received the most important part of his scientific education. And it was a student trained in the same schools, Francesco Redi—a man of the widest knowledge and most versatile abilities, distinguished alike as scholar, poet, physician, and naturalist,—who, just 202 years ago, published his “*Esperienze intorno alla Generazione degli Insetti*,” and gave to the world the idea, the growth of which it is my purpose to trace. Redi's book went through five editions in twenty years; and the extreme simplicity of his experiments, and the clearness of his arguments, gained for his views, and for their consequences, almost universal acceptance.

Redi did not trouble himself much with speculative considerations, but attacked particular cases of what was supposed to be “spontaneous generation” experimentally. Here are dead animals, or pieces of meat, says he; I expose them to the air in hot weather, and in a few days they swarm with maggots. You tell me that these are generated in the dead flesh; but if I put similar bodies, while quite fresh, into a jar, and tie some fine gauze over the top of the jar, not a maggot makes its appearance, while the dead substances, nevertheless, putrefy just in the same way as before. It is obvious, therefore, that the maggots are not generated by the corruption of the meat; and that the cause of their formation must be a something which is kept away by

gauze. But gauze will not keep away aëriiform bodies, or fluids. This something must, therefore, exist in the form of solid particles too big to get through the gauze. Nor is one long left in doubt what these solid particles are; for the blow-flies, attracted by the odour of the meat, swarm round the vessel, and, urged by a powerful but, in this case, misleading instinct, lay eggs, out of which maggots are immediately hatched, upon the gauze. The conclusion, therefore, is unavoidable; the maggots are not generated by the meat, but the eggs which give rise to them are brought through the air by the flies.

These experiments seem almost childishly simple, and one wonders how it was that no one ever thought of them before. Simple as they are, however, they are worthy of the most careful study, for every piece of experimental work since done, in regard to this subject, has been shaped upon the model furnished by the Italian philosopher. As the results of his experiments were the same, however varied the nature of the materials he used, it is not wonderful that there arose in Redi's mind a presumption, that in all such cases of the seeming production of life from dead matter, the real explanation was the introduction of living germs from without into that dead matter—(Redi, *Esperienze*, pp. 14–16). And thus the hypothesis that living matter always arises by the agency of pre-existing living matter, took definite shape; and had henceforward a right to be considered and a claim to be refuted, in each particular case, before the production of living matter in any other way could be admitted by careful reasoners. It will be necessary for me to refer to this hypothesis so frequently, that, to save circumlocution, I shall call it the hypothesis of *Biogenesis*; and I shall term the contrary doctrine—that living matter may be produced by not living matter—the hypothesis of *Abiogenesis*.

In the seventeenth century, as I have said, the latter was the dominant view, sanctioned alike by antiquity and by authority; and it is interesting to observe that Redi did not escape the customary tax upon a discoverer, of having to defend himself against the charge of impugning the authority of the Scriptures (Redi, *l. c.* p. 45, *Esperienze*,

p. 120); for his adversaries declared that the generation of bees from the carcass of a dead lion is affirmed, in the Book of Judges, to have been the origin of the famous riddle with which Samson perplexed the Philistines:—

Out of the eater came forth meat,

And out of the strong came forth sweetness.

Against all odds, however, Redi, strong with the strength of demonstrable fact, did splendid battle for Biogenesis; but it is remarkable that he held the doctrine in a sense which, if he had lived in these times, would have infallibly caused him to be classed among the defenders of "spontaneous generation." "Omne vivum ex vivo," "no life without antecedent life," aphoristically sums up Redi's doctrine; but he went no further. It is most remarkable evidence of the philosophic caution and impartiality of his mind, that, although he had speculatively anticipated the manner in which grubs really are deposited in fruits and in the galls of plants, he deliberately admits that the evidence is insufficient to bear him out; and he therefore prefers the supposition that they are generated by a modification of the living substance of the plants themselves. Indeed, he regards these vegetable growths as organs, by means of which the plant gives rise to an animal, and looks upon this production of specific animals as the final cause of the galls and of, at any rate, some fruits. And he proposes to explain the occurrence of parasites within the animal body in the same way.

It is of great importance to apprehend Redi's position rightly; for the lines of thought he laid down for us are those upon which naturalists have been working ever since. Clearly he held Biogenesis as against Abiogenesis; and I shall immediately proceed, in the first place, to inquire how far subsequent investigation has borne him out in so doing.

But Redi also thought that there were two modes of Biogenesis. By the one method, which is that of common and ordinary occurrence, the living parent gives rise to offspring, which passes through the same cycle of changes as itself—like gives rise to like; and this has been termed Homogenesis. By the other mode, the living parent was supposed to give rise to offspring which passed

through a totally different series of states from those exhibited by the parent, and did not return into the cycle of the parent; this is what ought to be called Heterogenesis, the offspring being altogether, and permanently, unlike the parent. The term Heterogenesis, however, has unfortunately been used in a different sense, and M. Milne-Edwards has therefore substituted for it Xenogenesis, which means the generation of something foreign. After discussing Redi's hypothesis of universal Biogenesis, then, I shall go on to ask how far the growth of science justifies his other hypothesis of Xenogenesis.

The progress of the hypothesis of Biogenesis was triumphant and unchecked for nearly a century. The application of the microscope to anatomy, in the hands of Crew, Leeuwenhoek, Swammerdam, Lyonet, Vallisnieri, Reaumur, and other illustrious investigators of nature of that day, displayed such a complexity of organization in the lowest and minutest forms, and everywhere revealed such a prodigality of provision for their multiplication by germs of one sort or another, that the hypothesis of Abiogenesis began to appear not only untrue, but absurd; and, in the middle of the eighteenth century, when Needham and Buffon took up the question, it was almost universally discredited. ("Nouvelles Observations," p. 169 and 176.)

But the skill of the microscope-makers of the eighteenth century soon reached its limit. A microscope magnifying 400 diameters was a *chef-d'œuvre* of the opticians of that day; and, at the same time, by no means trustworthy. But a magnifying power of 400 diameters, even when definition reaches the exquisite perfection of our modern achromatic lenses, hardly suffices for the mere discernment of the smallest forms of life. A speck, only 1-25th of an inch in diameter, has, at 10 inches from the eye, the same apparent size as an object 1-10000th of an inch in diameter, when magnified 400 times; but forms of living matter abound, the diameter of which is not more than 1-40000th of an inch. A filtered infusion of hay, allowed to stand for two days, will swarm with living things, among which, any which reaches the diameter of a human red blood-corpuscle, or about

1-3200th of an inch is a giant. It is only by bearing these facts in mind, that we can deal fairly with the remarkable statements and speculations put forward by Buffon and Needham in the middle of the eighteenth century.

When a portion of any animal or vegetable body is infused in water, it gradually softens and disintegrates; and, as it does so, the water is found to swarm with minute active creatures, the so-called Infusorial Animalcules, none of which can be seen except by the aid of the microscope; while a large proportion belong to the category of smallest things of which I have spoken, and which must have all looked like mere dots and lines under the ordinary microscopes of the eighteenth century.

Led by various theoretical considerations, which I cannot now discuss, but which looked promising enough in the lights of that day, Buffon and Needham doubted the applicability of Redi's hypothesis to the infusorial animalcules, and Needham very properly endeavoured to put the question to an experimental test. He said to himself, if these infusorial animalcules come from germs, their germs must exist either in the substance infused, or in the water with which the infusion is made, or in the superjacent air. Now the vitality of all germs is destroyed by heat. Therefore, if I boil the infusion, cork it up carefully, cementing the cork over with mastic, and then heat the whole vessel by heaping hot ashes over it, I must needs kill whatever germs are present. Consequently, if Redi's hypothesis hold good, when the infusion is taken away and allowed to cool, no animalcules ought to be developed in it; whereas, if the animalcules are not dependent on pre-existing germs, but are generated from the infused substance, they ought, by-and-by, to make their appearance. Needham found that, under the circumstances in which he made his experiments, animalcules always did arise in the infusions, when a sufficient time had elapsed to allow for their development.

In much of his work Needham was associated with Buffon, and the results of their experiments fitted admirably with the great French naturalist's hypothesis of "organic molecules," according to which, life is the indefeasible property of certain indestructible molecules of matter, which exist in all living things, and have inherent activities by which they are distinguished from not living matter. Each individual living organism is formed by their temporary combination. They stand to it in the relation of the particles of water to a cascade or a

whirlpool; or to a mould, into which the water is poured. The form of the organism is thus determined by the reaction between external conditions and the inherent activities of the organic molecules of which it is composed; and, as the stoppage of a whirlpool destroys nothing but a form, and leaves the molecules of the water, with all their inherent activities intact, so what we call the death and putrefaction of an animal or a plant is merely the breaking up of the form, or manner of association, of its constituent organic molecules, which are then set free as infusorial animalcules.

It will be perceived that this doctrine is by no means identical with *Abiogenesis*, with which it is often confounded. On this hypothesis, a piece of beef or a handful of hay is dead only in a limited sense. The beef is dead ox, and the hay is dead grass; but the "organic molecules", of the beef or the hay are not dead, but are ready to manifest their vitality as soon as the bovine or herbaceous shrouds in which they are imprisoned are rent by the macerating action of water. The hypothesis, therefore, must be classified under *Xenogenesis* rather than under *Abiogenesis*. Such as it was, I think it will appear, to those who will be just enough to remember that it was propounded before the birth of modern chemistry and of the modern optical arts, to be a most ingenious and suggestive speculation.

But the great tragedy of Science — the slaying of a beautiful hypothesis by an ugly fact — which is so constantly being enacted under the eyes of philosophers, was played, almost immediately, for the benefit of Buffon and Needham.

Once more, an Italian, the Abbé Spallanzani, a worthy successor and representative of Redi in his acuteness, his ingenuity, and his learning, subjected the experiments and the conclusions of Needham to a searching criticism. It might be true that Needham's experiments yielded results such as he had described, but did they bear out his arguments? Was it not possible, in the first place, that he had not completely excluded the air by corks and mastic? And was it not possible, in the second place, that he had not sufficiently heated his infusions and the superjacent air? Spallanzani joined issue with the English naturalist on both these pleas; and he showed that if, in the first place, the glass vessels in which the infusions were contained were hermetically sealed by fusing their necks, and if, in the second place, they were exposed to the temperature of boiling-water for three-quarters of an hour (see Spallanzani, "Opere," vi. pp. 42 and 51), no animal-

cules ever made their appearance within them. It must be admitted that the experiments and arguments of Spallanzani furnish a complete and a crushing reply to those of Needham. But we all too often forget that it is one thing to refute a proposition, and another to prove the truth of a doctrine which implicitly, or explicitly, contradicts that proposition; and the advance of science soon showed that though Needham might be quite wrong, it did not follow that Spallanzani was quite right.

Modern Chemistry, the birth of the latter half of the eighteenth century, grew apace, and soon found herself face to face with the great problems which Biology had vainly tried to attack without her help. The discovery of oxygen led to the laying of the foundations of a scientific theory of respiration, and to an examination of the marvelous interactions of organic substances with oxygen. The presence of free oxygen appeared to be one of the conditions of the existence of life, and of those singular changes in organic matters which are known as fermentation and putrefaction. The question of the generation of the infusory animalcules thus passed into a new phase. For what might not have happened to the organic matter of the infusions, or to the oxygen of the air, in Spallanzani's experiments? What security was there that the development of life which ought to have taken place had not been checked, or prevented, by these changes?

The battle had to be fought again. It was needful to repeat the experiments under conditions which would make sure that neither the oxygen of the air, nor the composition of the organic matter, was altered, in such a manner as to interfere with the existence of life.

Schulze and Schwann took up the question from this point of view in 1836 and 1837. The passage of air through red-hot glass tubes, or through strong sulphuric acid, does not alter the proportion of its oxygen, while it must needs arrest, or destroy, any organic matter which may be contained in the air. These experimenters, therefore, contrived arrangements by which the only air which should come into contact with a boiled infusion should be such as had either passed through red-hot tubes or through strong sulphuric acid. The result which they obtained was that an infusion so treated developed no living things, while if the same infusion was afterwards exposed to the air such things appeared rapidly and abundantly. The accuracy of these experiments has been alternately denied and affirmed. Supposing them to be accepted,

however, all that they really proved was, that the treatment to which the air was subjected destroyed *something* that was essential to the development of life in the infusion. This "something" might be gaseous, fluid, or solid; that it consisted of germs remained only an hypothesis of greater or less probability.

Contemporaneously with these investigations a remarkable discovery was made by Cagniard de La Tour. He found that common yeast is composed of a vast accumulation of minute plants. The fermentation of must, or of wort, in the fabrication of wine and of beer, is always accompanied by the rapid growth and multiplication of these *Torulæ*. Thus fermentation, in so far as it was accompanied by the development of microscopical organisms in enormous numbers, became assimilated to the decomposition of an infusion of ordinary animal or vegetable matter; and it was an obvious suggestion that the organisms were, in some way or other, the causes both of fermentation and of putrefaction. The chemists, with Berzelius and Liebig at their head, at first laughed this idea to scorn; but in 1843, a man then very young, who has since performed the unexampled feat of attaining to high eminence alike in Mathematics, Physics and Physiology, — I speak of the illustrious Helmholtz, — reduced the matter to the test of experiment by a method alike elegant and conclusive. Helmholtz separated a putrefying, or fermenting liquid, from one which was simply putrescible, or fermentable, by a membrane, which allowed the fluids to pass through and become intermixed, but stopped the passage of solids. The result was, that while the putrescible, or the fermentable, liquids became impregnated with the results of the putrescence, or fermentation, which was going on on the other side of the membrane, they neither putrefied (in the ordinary way) nor fermented; nor were any of the organisms which abounded in the fermenting, or putrefying, liquid generated in them. Therefore, the cause of the development of these organisms must lie in something which cannot pass through membrane; and as Helmholtz's investigations were long antecedent to Graham's researches upon colloids, his natural conclusion was, that the agent thus intercepted must be a solid material. In point of fact, Helmholtz's experiments narrowed the issue to this: that which excites fermentation and putrefaction, and at the same time gives rise to living forms in a fermentable, or putrescible, fluid, is not a gas and is not a diffusible fluid; therefore it is either a

colloid, or it is matter divided into very minute solid particles.

The researches of Schroeder and Dusch in 1854, and of Schroeder alone, in 1859, cleared up this point by experiments which are simply refinements upon those of Redi. A lump of cotton-wool is, physically speaking, a pile of many thicknesses of a very fine gauze, the fineness of the meshes of which depends upon the closeness of the compression of the wool. Now, Schroeder and Dusch found, that, in the case of all the putrefiable materials which they used (except milk and yolk of egg), an infusion boiled, and then allowed to come into contact with no air but such as had been filtered through cotton-wool, neither putrefied nor fermented, nor developed living forms. It is hard to imagine what the fine sieve formed by the cotton-wool could have stopped except minute solid particles. Still the evidence was incomplete until it had been positively shown, first, that ordinary air does contain such particles; and, secondly, that filtration through cotton-wool arrests these particles and allows only physically pure air to pass. This demonstration has been furnished within the last year by the remarkable experiments of Prof. Tyndall. It has been a common objection of Abiogenists that, if the doctrine of Biogeny is true, the air must be thick with germs; and they regard this as the height of absurdity. But Nature occasionally is exceedingly unreasonable, and Prof. Tyndall has proved that this particular absurdity may nevertheless be a reality. He has demonstrated that ordinary air is no better than a sort of stirabout of excessively minute solid particles; that these particles are almost wholly destructible by heat; and that they are strained off, and the air rendered optically pure, by being passed through cotton-wool.

But it remains yet in the order of logic, though not of history, to show that, among these solid destructible particles, there really do exist germs capable of giving rise to the development of living forms in suitable menstrua. This piece of work was done by M. Pasteur in those beautiful researches which will ever render his name famous, and which, in spite of all attacks upon them, appear to me now, as they did seven years ago ("Lectures to Working Men on the Causes of the Phenomena of Organic Nature," 1863), to be models of accurate experimentation and logical reasoning. He strained air through cotton-wool, and found, as Schroeder and Dusch had done, that it contained nothing competent to give rise to the development of

life in fluids highly fitted for that purpose. But the important further links in the chain of evidence added by Pasteur are three. In the first place, he subjected to microscopic examination the cotton-wool which had served as strainer, and found that sundry bodies, clearly recognizable as germs, were among the solid particles strained off. Secondly, he proved that these germs were competent to give rise to living forms by simply sowing them in a solution fitted for their development. And, thirdly, he showed that the incapacity of air strained through cotton-wool to give rise to life was not due to any occult change effected in constituents of the air by the wool, by proving that the cotton-wool might be dispensed with altogether, and perfectly free access left between the exterior air and that in the experimental flask. If the neck of the flask is drawn out into a tube and bent downwards, and if, after the contained fluid has been carefully boiled, the tube is heated sufficiently to destroy any germs which may be present in the air which enters as the fluid cools, the apparatus may be left to itself for any time, and no life will appear in the fluid. The reason is plain. Although there is free communication between the atmosphere laden with germs and the germless air in the flask, contact between the two takes place only in the tube; and as the germs cannot fall upwards, and there are no currents, they never reach the interior of the flask. But if the tube be broken short off where it proceeds from the flask, and free access be thus given to germs falling vertically out of the air, the fluid, which has remained clear and desert for months, becomes, in a few days, turbid and full of life.

These experiments have been repeated over and over again by independent observers with entire success; and there is one very simple mode of seeing the facts for oneself, which I may as well describe.

Prepare a solution (much used by M. Pasteur, and often called "Pasteur's solution") composed of water with tartrate of ammonia, sugar, and yeast-ash dissolved therein. Infusion of hay, treated in the same way, yields similar results; but as it contains organic matter, the argument which follows cannot be based upon it. Divide it into three portions in as many flasks; boil all three for a quarter of an hour; and, while the steam is passing out, stop the neck of one with a large plug of cotton-wool, so that this also may be thoroughly steamed. Now set the flasks aside to cool, and, when their contents are cold, add to one of the open ones a drop

of filtered infusion of hay which has stood for twenty-four hours, and is consequently full of the active and excessively minute organisms known as Bacteria. In a couple of days of ordinary warm weather, the contents of this flask will be milky, from the enormous multiplication of Bacteria. The other flask, open and exposed to the air, will, sooner or later, become milky with Bacteria, and patches of mould may appear in it; while the liquid in the flask, the neck of which is plugged with cotton-wool, will remain clear for an indefinite time. I have sought in vain for any explanation of these facts, except the obvious one, that the air contains germs competent to give rise to Bacteria, such as those with which the first solution has been knowingly and purposely inoculated, and to the mould Fungi. And I have not yet been able to meet with any advocate of Abiogenesis who seriously maintains that the atoms of sugar, tartrate of ammonia, yeast-ash and water, under no influence but that of free access of air and the ordinary temperature, re-arrange themselves and give rise to the protoplasm of Bacterium. But the alternative is to admit that these Bacteria arise from germs in the air; and, if they are thus propagated, the burden of proof, that other like forms are generated in a different manner, must rest with the assertor of that proposition.

To sum up the effect of this long chain of evidence:—

It is demonstrable, that a fluid eminently fit for the development of the lowest forms of life, but which contains neither germs nor any protein compound, gives rise to living things in great abundance, if it be exposed to ordinary air; while no such development takes place if the air with which it is in contact is mechanically freed from the solid particles, which ordinarily float in it, and which may be made visible by appropriate means.

It is demonstrable, that the great majority of these particles are destructible by heat, and that some of them are germs, or living particles, capable of giving rise to the same forms of life as those which appear when the fluid is exposed to unpurified air.

It is demonstrable, that inoculation of the experimental fluid with a drop of liquid known to contain living particles, gives rise to the same phenomena as exposure to unpurified air.

And it is further certain that these living particles are so minute that the assumption of their suspension in ordinary air presents not the slightest difficulty. On the contrary, considering their lightness and the

wide diffusion of the organisms which produce them, it is impossible to conceive that they should not be suspended in the atmosphere in myriads.

Thus the evidence, direct and indirect, in favour of Biogenesis for all known forms of life must, I think, be admitted to be of great weight.

On the other side, the sole assertions worthy of attention are, that hermetically sealed fluids, which have been exposed to great and long-continued heat, have sometimes exhibited living forms of low organization when they have been opened.

The first reply that suggests itself is the probability that there must be some error about these experiments, because they are performed on an enormous scale every day, with quite contrary results. Meat, fruits, vegetables, the very materials of the most fermentable and putrescible infusions, are preserved to the extent, I suppose I may say, of thousands of tons every year, by a method which is a mere application of Spallanzani's experiment. The matters to be preserved are well boiled in a tin case provided with a small hole, and this hole is soldered up when all the air in the case has been replaced by steam. By this method they may be kept for years, without putrefying, fermenting or getting mouldy. Now this is not because oxygen is excluded, inasmuch as it is now proved that free oxygen is not necessary for either fermentation or putrefaction. It is not because the tins are exhausted of air, for Vibriones and Bacteria live, as Pasteur has shown, without air or free oxygen. It is not because the boiled meats or vegetables are not putrescible or fermentable, as those who have had the misfortune to be in a ship supplied with unskilfully closed tins well know. What is it, therefore, but the exclusion of germs? I think that Abiogenists are bound to answer this question before they ask us to consider new experiments of precisely the same order.

And in the next place, if the results of the experiments I refer to are really trustworthy, it by no means follows that Abiogenesis has taken place. The resistance of living matter to heat is known to vary within considerable limits, and to depend, to some extent, upon the chemical and physical qualities of the surrounding medium. But if, in the present state of science, the alternative is offered us, either germs can stand a greater heat than has been supposed, or the molecules of dead matter, for no valid or intelligible reason that is assigned, are able to re-arrange themselves into living bodies, exactly such

as can be demonstrated to be frequently produced in another way, I cannot understand how choice can be, even for a moment, doubtful.

But though I cannot express this conviction of mine too strongly, I must carefully guard myself against the supposition that I intend to suggest that no such thing as Abiogenesis ever has taken place in the past, or ever will take place in the future. With organic chemistry, molecular physics, and physiology yet in their infancy, and every day making prodigious strides, I think it would be the height of presumption for any man to say that the conditions under which matter assumes the properties we call "vital" may not, some day, be artificially brought together. All I feel justified in affirming is, that I see no reason for believing that the feat has been performed yet.

And, looking back through the prodigious vista of the past, I find no record of the commencement of life, and therefore I am devoid of any means of forming a definite conclusion as to the conditions of its appearance. Belief, in the scientific sense of the word, is a serious matter, and needs strong foundations. To say, therefore, in the admitted absence of evidence, that I have any belief as to the mode in which the existing forms of life have originated, would be using words in a wrong sense. But expectation is permissible where belief is not; and if it were given me to look beyond the abyss of geologically recorded time to the still more remote period when the earth was passing through physical and chemical conditions, which it can no more see again than a man may recall his infancy, I should expect to be a witness of the evolution of living protoplasm from not living matter. I should expect to see it appear under forms of great simplicity, endowed, like existing fungi, with the power of determining the formation of new protoplasm from such matters as ammonium carbonates, oxalates and tartrates, alkaline and earthy phosphates, and water, without the aid of light. That is the expectation to which analogical reasoning leads me; but I beg you once more to recollect that I have no right to call my opinion anything but an act of philosophical faith.

So much for the history of the progress of Redi's great doctrine of Biogenesis, which appears to me, with the limitations I have expressed, to be victorious along the whole line at the present day.

As regards the second problem offered to us by Redi, whether Xenogenesis obtains, side by side with Homogenesis; whether, that is, there exist not only the ordinary

living things, giving rise to offspring which run through the same cycle as themselves, but also others, producing offspring which are of a totally different character from themselves, the researches of two centuries have led to a different result. That the grubs found in galls are no product of the plants on which the galls grow, but are the result of the introduction of the eggs of insects into the substance of these plants, was made out by Vallisnieri, Reaumur, and others, before the end of the first half of the eighteenth century. The tapeworms, bladderworms and flukes continued to be a stronghold of the advocates of Xenogenesis for a much longer period. Indeed, it is only within the last thirty years that the splendid patience of Von Siebold, Van Beneden, Leuckart, Küchenmeister, and other helminthologists, has succeeded in tracing every such parasite, often through the strangest wanderings and metamorphoses, to an egg derived from a parent actually or potentially like itself; and the tendency of inquiries elsewhere has all been in the same direction. A plant may throw off bulbs, but these, sooner or later, give rise to seeds or spores, which develop into the original form. A polype may give rise to Medusæ, or a pluteus to an Echinoderm, but the Medusa and the Echinoderm give rise to eggs which produce polypes or plutei, and they are therefore only stages in the cycle of life of the species.

But if we turn to Pathology, it offers us some remarkable approximations to true Xenogenesis.

As I have already mentioned, it has been known since the time of Vallisnieri and of Reaumur that galls in plants and tumours in cattle are caused by insects, which lay their eggs in those parts of the animal or vegetable frame of which these morbid structures are outgrowths. Again, it is a matter of familiar experience to everybody that mere pressure on the skin will give rise to a corn. Now the gall, the tumour, and the corn are parts of the living body, which have become, to a certain degree, independent and distinct organisms. Under the influence of certain external conditions, elements of the body, which should have developed in due subordination to its general plan, set up for themselves, and apply the nourishment which they receive to their own purposes.

From such innocent productions as corns and warts there are all gradations to the serious tumours which, by their mere size and the mechanical obstruction they cause, destroy the organism out of which they are developed; while, finally, in those terrible

structures known as cancers, the abnormal growth has acquired powers of reproduction and multiplication, and is only morphologically distinguishable from the parasitic worm, the life of which is neither more nor less closely bound up with that of the infested organism.

If there were a kind of diseased structure, the histological elements of which were capable of maintaining a separate and independent existence out of the body, it seems to me that the shadowy boundary between morbid growth and Xenogenesis would be effaced. And I am inclined to think that the progress of discovery has almost brought us to this point already. I have been favoured by Mr. Simon with an early copy of the last published of the valuable "Reports on the Public Health," which, in his capacity of their Medical Officer, he annually presents to the Lords of the Privy Council. The Appendix to this Report contains an introductory essay "On the Intimate Pathology of Contagion," by Dr. Burdon Sanderson, which is one of the clearest, most comprehensive, and well-reasoned discussions of a great question which has come under my notice for a long time. I refer you to it for details and for the authorities for the statements I am about to make.

You are familiar with what happens in vaccination. A minute cut is made in the skin and an infinitesimal quantity of vaccine matter is inserted into the wound. Within a certain time, a vesicle appears in the place of the wound, and the fluid which distends this vesicle is vaccine matter, in quantity a hundred or a thousand-fold that which was originally inserted. Now what has taken place in the course of this operation? Has the vaccine matter by its irritative property produced a mere blister, the fluid of which has the same irritative property? Or does the vaccine matter contain living particles, which have grown and multiplied where they have been planted? The observations of M. Chauveau, extended and confirmed by Dr. Sanderson himself, appear to leave no doubt upon this head. Experiments, similar in principle to those of Helmholtz on fermentation and putrefaction, have proved that the active element in the vaccine lymph is non-diffusible, and consists of minute particles not exceeding .0005 of an inch in diameter, which are made visible in the lymph by the microscope. Similar experiments have proved that two of the most destructive of epizootic diseases, sheep-pox and glanders, are also dependent for their existence and their propagation upon extremely small living solid particles, to

which the title of *microzymes* is applied. An animal suffering under either of these terrible diseases is a source of infection and contagion to others, for precisely the same reason as a tub of fermenting beer is capable of propagating its fermentation by "infection," or "contagion," to fresh wort. In both cases it is the solid living particles which are efficient; the liquid in which they float, and at the expense of which they live, being altogether passive.

Now arises the question, are these microzymes the results of *Homogenesis*, or of *Xenogenesis*; are they capable, like the *Torula* of yeast, of arising only by the development of pre-existing germs; or may they be, like the constituents of a nut-gall the results of a modification and individualization of the tissues of the body in which they are found, resulting from the operation of certain conditions? Are they parasites in the zoological sense, or are they merely, what Virchow has called "heterologous growths"? It is obvious that this question has the most profound importance, whether we look at it from a practical, or from a theoretical, point of view. A parasite may be stamped out by destroying its germs, but a pathological product can only be annihilated by removing the conditions which give rise to it.

It appears to me that this great problem will have to be solved for each zymotic disease separately, for analogy cuts two ways. I have dwelt upon the analogy of pathological modification, which is in favour of the xenogenetic origin of microzymes; but I must now speak of the equally strong analogies in favour of the origin of such pestiferous particles by the ordinary process of the generation of like from like.

It is, at present, a well-established fact that certain diseases, both of plants and of animals, which have all the characters of contagious and infectious epidemics, are caused by minute organisms. The smut of wheat is a well-known instance of such a disease, and it cannot be doubted that the grape-disease and the potato-disease fall under the same category. Among animals, insects are wonderfully liable to the ravages of contagious and infectious diseases caused by microscopic Fungi.

In autumn, it is not uncommon to see flies, motionless, upon a window-pane, with a sort of magic circle, in white, drawn round them. On microscopic examination, the magic circle is found to consist of innumerable spores, which have been thrown off in all directions by a minute fungus called *Empusa muscæ*, the spore-forming filaments of which stand out like a pile of velvet

from the body of the fly. These spore-forming filaments are connected with others, which fill the interior of the fly's body like so much fine wool, having eaten away and destroyed the creature's viscera. This is the full-grown condition of the *Empusa*. If traced back to its earlier stages, in flies which are still active, and to all appearance healthy, it is found to exist in the form of minute corpuscles which float in the blood of the fly. These multiply and lengthen into filaments, at the expense of the fly's substance; and when they have at last killed the patient, they grow out of its body and give off spores. Healthy flies shut up with diseased ones catch this mortal disease and perish like the others. A most competent observer, M. Cohn, who studied the development of the *Empusa* in the fly very carefully, was utterly unable to discover in what manner the smallest germs of the *Empusa* got into the fly. The spores could not be made to give rise to such germs by cultivation; nor were such germs discoverable in the air, or in the food of the fly. It looked exceedingly like a case of *Abiogenesis*, or, at any rate of *Xenogenesis*; and it is only quite recently that the real course of events has been made out. It has been ascertained, that when one of the spores falls upon the body of a fly, it begins to germinate, and sends out a process which bores its way through the fly's skin; this, having reached the interior cavities of its body, gives off the minute floating corpuscles which are the earliest stage of the *Empusa*. The disease is "contagious," because a healthy fly coming in contact with a diseased one, from which the spore-bearing filaments protrude, is pretty sure to carry off a spore or two. It is "infectious" because the spores become scattered about all sorts of matter in the neighbourhood of the slain flies.

The silkworm has long been known to be subject to a very fatal contagious and infectious disease called the *Muscadine*. Audouin transmitted it by inoculation. This disease is entirely due to the development of a fungus, *Botrytis Bassiana*, in the body of the caterpillar; and its contagiousness and infectiousness are accounted for in the same way as those of the fly disease. But of late years a still more serious epizootic has appeared among the silkworms: and I may mention a few facts which will give you some conception of the gravity of the injury which it has inflicted on France alone.

The production of silk has been, for centuries, an important branch of industry in Southern France, and in the year 1833 it

had attained such a magnitude, that the annual produce of the French sericulture was estimated to amount to a tenth of that of the whole world, and represented a money value of 117,000,000 francs, or nearly five millions sterling. What may be the sum which would represent the money-value of all the industries connected with the working up of the raw silk thus produced, is more than I can pretend to estimate. Suffice it to say, that the City of Lyons is built upon French silk, as much as Manchester was upon American cotton before the civil war.

Silkworms are liable to many diseases; and even before 1853, a peculiar epizootic, frequently accompanied by the appearance of dark spots upon the skin (whence the name of "*Pèbrine*" which it has received), had been noted for its mortality. But in the years following 1853 this malady broke out with such extreme violence, that, in 1856, the silk-crop was reduced to a third of the amount which it had reached in 1853; and, up till within the last year or two, it has never attained half the yield of 1853. This means not only that the great number of people engaged in silk-growing are some thirty millions sterling poorer than they might have been; it means not only that high prices have had to be paid for imported silkworm eggs, and that, after investing his money in them, in paying for mulberry-leaves and for attendance, the cultivator has constantly seen his silkworms perish and himself plunged in ruin, — but it means that the looms of Lyons have lacked employment, and that, for years, enforced idleness and misery have been the portion of a vast population which, in former days, was industrious and well to do.

In 1858 the gravity of the situation caused the French Academy of Sciences to appoint Commissioners, of whom a distinguished naturalist, M. de Quatrefages, was one, to inquire into the nature of this disease, and, if possible, to devise some means of staying the plague. In reading the Report (*Etudes sur les Maladies Actuelles des Vers à Soie*, p. 53) made by M. de Quatrefages, in 1859, it is exceedingly interesting to observe that his elaborate study of the *Pèbrine* forced the conviction upon his mind that, in its mode of occurrence and propagation, the disease of the silkworm is, in every respect, comparable to the cholera among mankind. But it differs from the cholera, and, so far, is a more formidable disease, in being under some circumstances contagious, as well as infectious.

The Italian naturalist, Filippi, discovered in the blood of the silkworms affected by

this strange disease, a multitude of cylindrical corpuscles, each about 1-6000th of an inch long. These have been carefully studied by Lebert, and named by him *Panhistophyton*; for the reason that, in subjects in which the disease is strongly developed, the corpuscles swarm in every tissue and organ of the body, and even pass into the undeveloped eggs of the female moth. But are these corpuscles causes, or mere concomitants, of the disease? Some naturalists took one view and some another; and it was not until the French Government, alarmed by the continued ravages of the malady, and the inefficiency of the remedies which had been suggested, despatched M. Pasteur to study it, that the question received its final settlement; at a great sacrifice, not only of the time and peace of mind of that eminent philosopher, but, I regret to have to add, of his health.

But the sacrifice has not been in vain. It is now certain that this devastating, cholera-like *Pébrine* is the effect of the growth and multiplication of the *Panhistophyton* in the silkworm. It is contagious and infectious because the corpuscles of the *Panhistophyton* pass away from the bodies of the diseased caterpillars, directly or indirectly, to the alimentary canal of healthy silkworms in their neighbourhood; it is hereditary, because the corpuscles enter into the eggs while they are being formed, and consequently are carried within them when they are laid; and for this reason, also, it presents the very singular peculiarity of being inherited only on the mother's side. There is not a single one of all the apparently capricious and unaccountable phenomena presented by the *Pébrine*, but has received its explanation from the fact that the disease is the result of the presence of the microscopic organism, *Panhistophyton*.

Such being the facts with respect to the *Pébrine*, what are the indications as to the method of preventing it? It is obvious that this depends upon the way in which the *Panhistophyton* is generated. If it may be generated by *Abiogenesis*, or by *Xenogenesis*, within the silkworm or its moth, the extirpation of the disease must depend upon the prevention of the occurrence of the conditions under which this generation takes place. But if, on the other hand, the *Panhistophyton* is an independent organism, which is no more generated by the silkworm than the mistletoe is generated by the oak, or the apple-tree, on which it grows, though it may need the silkworm for its development, in the same way as the mistletoe needs the tree, then the indications are totally different. The sole thing to be done is to

get rid of and keep away the germs of the *Panhistophyton*. As might be imagined, from the course of his previous investigations, M. Pasteur was led to believe that the latter was the right theory; and guided by the theory, he has devised a method of extirpating the disease, which has proved to be completely successful wherever it has been properly carried out.

There can be no reason, then, for doubting that, among insects, contagious and infectious diseases of great malignity are caused by minute organisms which are produced by pre-existing germs, or by *Homogenesis*; and there is no reason, that I know of, for believing that what happens in insects may not take place in the highest animals. Indeed, there is already strong evidence that some diseases of an extremely malignant and fatal character to which man is subject, are as much the work of minute organisms as is the *Pébrine*. I refer for this evidence to the very striking facts adduced by Prof. Lister in his various well-known publications on the antiseptic method of treatment. It seems to me impossible to rise from the perusal of those publications without a strong conviction that the lamentable mortality which so frequently dogs the footsteps of the most skilful operator, and those deadly consequences of wounds and injuries which seem to haunt the very walls of great hospitals, and are even now destroying more men than die of bullet or bayonet, are due to the importation of minute organisms into wounds, and their increase and multiplication; and that the surgeon who saves most lives will be he who best works out the practical consequences of the hypothesis of Redi.

I commenced this Address by asking you to follow me in an attempt to trace the path which has been followed by a scientific idea, in its long and slow progress from the position of a probable hypothesis to that of an established Law of Nature. Our survey has not taken us into very attractive regions; it has lain chiefly in a land flowing with the abominable, and peopled with mere grubs and mouldiness. And it may be imagined with what smiles and shrugs practical and serious contemporaries of Redi and of Spallanzani may have commented on the waste of their high abilities in toiling at the solution of problems which, though curious enough in themselves, could be of no conceivable utility to mankind.

Nevertheless, you will have observed that before we had travelled very far upon our road, there appeared, on the right hand and on the left, fields laden with a harvest of golden grain, immediately convertible into

those things which the most sordidly practical of men will admit to have value, — namely, money and life.

The direct loss to France caused by the Pêbrine in seventeen years cannot be estimated at less than fifty millions sterling; and if we add to this what Redi's idea, in Pasteur's hands, has done for the wine-grower and for the vinegar-maker, and try to capitalize its value, we shall find that it will go a long way towards repairing the money losses caused by the frightful and calamitous war of this autumn.

And as to the equivalent of Redi's thought in life, how can we over-estimate the value of that knowledge of the nature of epidemic and epizootic diseases, and, consequently, of the means of checking or eradicating them, the dawn of which has assuredly commenced?

Looking back no further than ten years, it is possible to select three (1863, 1864 and 1869), in which the total number of deaths from scarlet fever alone amounted to 90,000. That is the return of killed, the maimed and disabled being left out of sight. Why, it is to be hoped that the list of killed in the present bloodiest of all wars will not amount to more than this! But the facts which I have placed before you must leave the least sanguine without a doubt that the nature and the causes of this scourge will one day be as well understood as those of the Pêbrine are now; and that the long-suffered massacre of our innocents will come to an end.

And thus mankind will have one more admonition that the "people perish for lack of knowledge"; and that the alleviation of the miseries and the promotion of the welfare of men must be sought, by those who will not lose their pains, in that diligent, patient, loving study of all the multitudinous aspects of Nature, the results of which constitute exact knowledge, or Science.

It is the justification and the glory of this great Meeting that it is gathered together for no other object than the advancement of the moiety of Science which deals with those phenomena of Nature which we call Physical. May its endeavours be crowned with a full measure of success!

From The Spectator.

Professor Huxley, as President of the British Association, which met at Liverpool on Wednesday, adopted the excellent principle of devoting his address to the discussion of a single subject, instead of to one of those perplexing *résumés* of scientific progress on all its lines which few men are competent to prepare, and fewer still to understand. His chosen subject was the history of the controversy respecting the origin of life, whether life is always generated from a parent life actually or potentially similar in organization, which he called the hypothesis of Biogenesis (birth from what is living); or whether life can be produced from that which is not living, under special conditions, Abiogenesis (birth from what is not living); or whether, finally, forms of life of one kind (animal, for instance,) can be generated from forms of life of a quite different kind (as, for example, vegetable), which the Professor called Xenogenesis (or birth from a strange or foreign organism). The whole history of biological discovery during the last two or three hundred years points clearly, the Professor showed, to the first hypothesis, that life is, under the present conditions of our universe, generated only from living organisms actually or potentially of the same kind as the offspring. But he guarded himself from being understood to assert, or even suppose, that this has always been so. "If it were given me," he said, "to look beyond the abyss of geologically recorded time to the still more remote period when the earth was passing through physical and chemical conditions which it can no more see again than a man can recall his infancy, I should expect to be a witness of the evolution of living protoplasm from not living matter." But Professor Huxley gave no sort of ground for his expectation, which appears to us pure conjecture. Surely we ought to find even now producible evidence of what he calls Xenogenesis, — i.e., the production from one organic form of another radically different, — if the origin of life is to be found in special combinations of that which is not living. We should call the Professor's "expectation" not what he called it, an act of "philosophical faith," but rather a philosophical *coup d'état*, or act of revolutionary conjecture.

From Good Words.

FERNYHURST COURT.

AN EVERY-DAY STORY.

BY THE AUTHOR OF "STONE EDGE."

CHAPTER I.

LIFE IN A COUNTRY HOUSE.

"PAPA, look what a very black cloud is coming up;" said May, perched upon a shaggy brown pony, and waiting at the back of some farm buildings for the Squire, who was overlooking the roofing of a cattle-shed, with the farmer by his side. "Papa's half-hour is very long," she sighed to herself. It was very dull in the corner. For the first ten minutes her patience had been exemplary, her virtue having been much helped by the great black retriever; but Ranger had frightened away all the chickens, and driven the kitten into a tree, and having exhausted the limited resources of the place, could hardly be kept out of the neighbouring copse. Pansy, too, was growing very fidgety; and May, liking quiet as little as her companions, suddenly saw with delight the thunder-cloud coming to her assistance.

The Squire looked up at the weather. "By Jove" (the old schoolboy asseveration is not extinct in England), "we shall be caught if we don't make haste. The churn-house must wait, Allen."

And, to the equal pleasure of child, dog, and pony, they rode off at a great pace, May's little Shetland cantering as fast as it could lay its short legs to the ground, to keep up with the stride of the long-limbed iron-grey old hunter, with its swinging trot, on which her father went along so rapidly without any apparent effort, that it was all the pony could do to hold its own.

"I believe that was the nineteenth request old Allen has made this year," laughed the Squire. "It was quite time to come away. I'm afraid you'll be wet through, Puss, as it is," he said, as the storm broke over them before they were half-way home.

"Oh, papa, it doesn't signify, it's so nice," answered the child, shaking her brown wet locks (her mane, as her father

called it), her cheeks shining in the rain, and her eyes sparkling. They dashed up in the pelting shower, past the old red-brick house, with its clustered chimneys and ogee gables, which looked warm and pleasant among the tall beech-trees, even in the midst of the rain, on to the stable-yard, and passed into the house by the back-door.

"And now," said her father, taking the bright little face between both his hands, and kissing it, "run up-stairs directly, and get off your wet things, child."

May was the youngest of a large family, and her father's delight. He was supposed to have been rather stern to his other children, but she and he had been constant companions ever since she could walk, and the strictest friends and allies.

"She's such good company," he said one day to the rector, an old college friend, to whom he had given the Fernyhurst living, on the edge of the park, and who was nearly as fond of her as her father.

Railroads have broken up all provincial centres, but this was before the time of railways, and the Squire was a great man in a small way. His estate was one of the largest, and his family the oldest, in a part of the country where the properties were large and the pedigrees long. He was a shy, reserved man, though he had lived a good deal in the world. He attended, however, to all magistrates', county, and poor-law business, and was respected and liked by his neighbours. He hunted regularly: the foxes were abundant at Fernyhurst, the pheasants plentiful enough (though his sons complained of the want of preserving), and altogether he was esteemed an honourable gentleman, who did his duty both to man and beast.

Mrs. Dimsdale was not so popular as her husband. She was somewhat of a fine lady, and her manners were cold, and what the village called "hotty." She was extremely fond of London, which the Squire had en-

dured and hated for six or eight weeks every season, posting up some eighty miles in the big coach in about ten hours at shortest. Having sadly submitted to be made member for the county, he had been three wretched years in Parliament, but the misery of the life was more than he could endure; the late hours, the fierceness of the faction fights in those days, when he had to vote with his party, right or wrong, while he possessed the unfortunate faculty of thinking for himself, without the eloquence to explain his views. At last, having never been laid up in his life except from a broken bone out hunting, he fell really and honestly sick, and a general dissolution of Parliament having honourably set him at liberty, he hardly ever went near town for above a week or two at a time.

His two elder daughters, rather fine and cold, like their mother, had had a governess, and masters, and "proper advantages" in London; but when the little May came into the world after a couple of brothers, and an interval of many years, it was really too much trouble to begin education all over again, and it was understood that her sisters were to teach her. The eldest, however, soon married, and Miss Cecilia had no vocation whatever in the teaching line; and accordingly May grew up very much as Nature pleased. Her mother ordered her to learn a certain portion of French and music, and sent her to Cecilia when it was supposed to be done, who, languidly putting down her work or her book, let the child gabble through her tenses all wrong, or play through her piece without two notes right in a bar.

But there are other things to be learnt in the world besides French and music — intimacy with a high-minded, cultivated, clever man is of itself the best possible education. Her father did not like to have her long out of his sight, and accordingly, as soon as she could sit on a pony, she had followed him about, perfectly fearless, as is often the case with very young things — too well guarded to have learned to take care for themselves, and too inexperienced to understand what they have escaped. There was plenty of sense and purpose under the mane of shaggy brown curls — more, indeed, than most of the people round her knew of. As time went on, and she grew older, she nibbled at all sorts of subjects, and had read more than her two sisters put together already, of the most heterogeneous kinds: it was done, however, in secret, lest her mother should put a stop to her proceedings, or Cecilia should be contemptuous.

How is it that the most extreme varieties

of character are to be found alongside in the same family, born of the same parents, bred in much the same circumstances? It is as if Nature had a certain quantity of material given her and did not know how to mix it: all the sugar goes into one corner, all the suet into another, and the plums and the flour are hopelessly divorced. One is remarkable for caution and common sense, while all the romantic generosity, impulse, and poetry seem to have been taken by the next; a third is full of dogmatic self-conceit and love of intermeddling with other people; and the humility, tact, and self-denying kindness of the last are equally striking. The Dimsdales varied almost as widely, and there were so many of them, and of ages so widely apart, that, as in most large families, the different sets were hardly more to each other than common acquaintances. The eldest had married and left home so long before, that May only considered her a matron whose children were nearly of her own age; next came the august Captain Dimsdale in a regiment of Guards, a surprisingly great man indeed, to be the son of so very modest and unassuming a father. Cecilia was succeeded by a boy at sea; and the two youngest, Tom and May, were so far cut off from the others that they almost seemed to belong to another family, and were a good deal thrown upon each other. Although, as being "only a girl," and two or three years younger, Tom considered it a great condescension to play with her in the holidays, yet she was "better than nothing," i.e., a good deal more inventive and intelligent than himself.

The park was a beautiful mixture of forest and wild heathery ground, the knolls covered with picturesque twisted oak, brilliant hollies, and old thorn intermixed with fern, while groves of tall beech filled the hollows. On one of the open spaces was a bright breezy pool, and here with much trouble Tom had launched a small flat-bottomed boat, built nominally by himself, i.e., he had stood with his hands in his pockets diligently over his father's carpenters till it reached the painting stage, when it came out under his touch a bright blue picked out with scarlet, and May was brought down in triumph to the pool to christen it after herself. She was quite as much delighted and honoured as was expected of her, which is saying a great deal.

"It must be called the *Mayflower*, and we'll sail across to America," you know, Tom. Oh, we mustn't row, I'm sure the pilgrim fathers sailed;" she said, anxious for the "local colouring."

"I've brought down the big red umbrella,

and you must sit and hold it up as a sail; there, mind you hold tight," said her brother. "What'll mamma say? It's the old French one."

"It's the biggest in the house," said Tom.

He was as innocent as other schoolboys of all knowledge of pilgrim fathers, but one name was as good as another, besides which this one offered the double advantage of requiring attacks upon the boat by Indians with spears, and then of its defence by himself, in a noble attitude, striding across the seats.

"I wonder whether Scrope will think much of it," said he, sitting down rather out of breath with his exertions. "I want papa to ask him; he's such a fine fellow, head of the Eleven. Yes, he has done pretty well in the schools; but it's the games he's so good at. The boys don't think much of a sap, but he's in the sixth form, so he can do as he pleases. I'm afraid he won't come."

"What, is he too grand?" said May, with some awe.

"Well, you know, we haven't any cricket here, and he's very near the head of the school, and a great swell, and there's nothing to amuse him."

"Why, surely there's shooting," put in May humbly.

"I don't know that the shooting is good enough, the governor preserves so badly," said Tom with a sigh.

"But, dear, Lord William and Sir Charles Malcolm shot here when Hastings was at home, and they didn't seem to think it bad."

It might be all very well, however, for a county member and a general officer, but yet not for the head of the Eleven, in Tom's eyes. We talk of hero-worship being dead, — it is a perfect passion in the heart of boys. The profound reverence and admiration inspired by a successful boy at a great public school are very touching. There is nothing in after life, as Canning once said, which can be compared with the splendour of his position. No prime minister or successful soldier, no chancellor or archbishop ever stands in such proud pre-eminence, or receives such loyal, enthusiastic, outspoken acknowledgment of his merits from his contemporaries. What was Lord Palmerston's position (though he had something of the schoolboy element in him to the last) in carrying a close division, to the triumph of being "hoisted" after a match? Physically, perhaps, there may be some objection to lying on the uneasy shoulders of frantic supporters, while one's arms and legs are

dragged violently in different directions by admirers half mad with victory, but then mentally what glory!

So Tom looked up to Scrope as a simple mortal might do to those demigods whose histories the schoolboy learned so unwillingly; and he considered nothing good enough for so important a personage.

"Oh, papa, isn't it beautiful? Look, I'm the pilgrim fathers, just got to America, and Tom's the ferocious Indians!" screamed May, as the Squire rode up looking tired with his five hours at a magistrates' meeting, some of that unpaid and unbanked work of which there is so much silently done in England. It was a pretty group, May squatting in the boat under her red umbrella, Tom brandishing a long reed, the evening light behind the great trees reflected in the bright water, the grey horse and its rider, whose seat was so easy and yet so firm that they always looked as if they had grown together.

"I'm afraid I'm pilgrim fathers will go to the bottom; Tom, you must have a safer sail than that. What, you've got my old Pyrenean umbrella!" said he, getting off. "Come and walk home with me, May; it's quite time for you to go in."

"And I may ride Nimrod when I've put up the boat," cried Tom.

"Papa, Tom wants you to ask Scrope; you'll let him ask Scrope?" said May eagerly, as she hung on to her father's arm.

"Who on earth is Scrope?" answered he, with a smile; "where does he come from? Tom's mouth is always full of Scrope. Who is his father, and where does he live?"

"He's a clergyman in the North somewhere, and he's got a great lot of children — I don't know anything more about him," put in Tom, who was now scrambling on to the horse; "but Scrope's head of the Eleven, papa; I'm sure you'd like him very much."

The fates, however, were adverse, and though the invitation was duly sent, the great man was destined not to honour Fernyhurst at this time with his presence.

"Did you finish what you had to do for Mr. Drayton, Tom?" said Mr. Dimsdale, a little sternly, turning to the boy, who was beginning to ride off. "Do you hear what I say?" he called still louder; but Nimrod's legs were long, and Tom was instinctively out of hearing.

"I wish that boy would use his head as well as his heels half an hour in the day," muttered the Squire in an annoyed tone.

"Papa, Mr. Drayton said it didn't so

signify this last week of the holidays," said May, standing timidly in the breach.

"That's only because it's utterly hopeless to get a stroke of work out of him, and it was so kind of Mr. Drayton to offer to read with him. I hope *you've* done what he told you," went on her father, vexed and angry, for May had been admitted to the honour of the lesson as Tom's inseparable companion.

She did not answer, and Mr. Dimsdale put his hand under her chin, turned up her little face, and looked into it. "Did you do it, May?" persisted he.

"Yes, papa," she said, in the lowest possible tone, and flushing up to the roots of her hair, as it seemed to her a sort of disloyalty to Tom.

"And why couldn't he, I wonder?"

"Oh, papa, it's quite different. I like it, you know!" she cried anxiously.

"And why shouldn't he, I want to know?" But the pleading look in her eyes had carried the day, and Tom escaped further questioning for this time at least.

The rector's offer had been a decided failure. Tom considered any such occupation in the holidays as a base inroad on the rights of boy, even when the day was too long for him; and if he was forced to open a book, he at least determined to learn nothing out of it. Under such discouragement even Mr. Drayton's patience gave way.

"I can't stand Master Tom any longer. I declare he's too bad," he said at last; "but I'll go on reading with you if you like, May," he added when he saw her disappointed face.

It was a great enjoyment to the fresh mind of the girl, and checked the excessively desultory character of almost all solitary reading. Mr. Drayton was not a pedant, but a well-read man such as used often to be found in the most secluded parsonages. He read history with her; he taught her some Latin, and a good deal of English, and what is to be found in English literature, the beauty of style, of composition, to enjoy the splendid march of magnificent words in Milton and Gibbon, and the terse sharp-shooting of modern writing. A girl is so quick in apprehending the meaning of what she reads that she requires the accuracy and thoroughness of the best teaching even more than does a boy, whereas all the instruction which she generally receives is from some half-educated governess obliged to earn a living, who, having learned nothing well herself, takes to teaching because she can do little else; while for our boys we obtain the cleverest men whom

salary and position combined can secure for the post. The head masters of Eton and Harrow are more highly paid than the Prime Minister, and are on the road to the most distinguished preferment in the Church. The Dons at Oxford and Cambridge are (at least in their own estimation) the greatest men on earth. Nothing is too good for a boy's education, nothing too bad for a girl's. And then the "inaccuracy" of women is talked of scornfully. How can it for the most part be otherwise then?

CHAPTER II.

TOM'S HERO.

IT was between three and four years after, and Tom's first year at college. This step to manhood was a source to him of infinite delight, and he related his great deeds in glowing terms to May, whose enthusiastic interest was always ready for everything that he had to tell. Sometimes she appealed to him for help. Tom laughed unmercifully at her appetite for knowledge, quizzed her ineffectual struggles with Greek Testament and other such attempts. But it is pleasant to be erected into an oracle, and he, a younger son, little given to learning, by no means over-sated by this kind of worship, did what he could in a grand and supercilious way.

"And then I've been reading the Hecuba and Alcestes," said he, unpacking some of his books, and winding up a rather magniloquent account of his performances, as he and May sat in the deep window-seat of the old nursery, which was now used only as a sort of retreat for her.

"Oh, how I should like to read those Greek plays! But I suppose I never shall learn enough for that," replied May, looking over his shoulder.

"My dear pusskin, how can you be so absurd?" cried Tom with a laugh that might have been heard all over the house.

"Why, the Hecuba is unmitigated 'bosh!' — all exclamations and rubbish; and the chorus says 'Ah' to Hecuba, and Hecuba says 'O popoi' to the chorus. There is no sense whatever in it. Now where's that bit I told you to do? Come back to your tenses; you've got *τῶτο* all wrong."

"Yes, I see. But, Tom, I couldn't understand that line, 'The moon is shining on the Trojan army;' it's very beautiful, and then comes that difficult bit."

"My dear, you've nothing to do with the beauty; just you stick to the grammar, that's all you've got to attend to," replied her mentor, much to her disappointment. May's taste, like most other girls' was

farther advanced than her brother's. She was older for her age. She had the keenest pleasure in the beauty of what she was reading, the charm of the descriptions, the harmony and rhythm of the poetry, while Tom was engrossed in the mechanism, in grammar not as a means to understanding a book, but as an end, *i.e.*, of class position or examination. Any enjoyment in the works themselves which they are reading is scarcely felt by one, indeed, in a hundred schoolboys; and even later in life, Byron's feeling towards "Horace, whom he hated so," seems to be shared by half the gentlemen of England, who have spent ten of the best years of their lives in learning little else.

"Just think," Tom went on in a few minutes, "I'm on the same stairs with Scrope; he's only been up a year; he broke his leg, and that stopped him two terms, and he's very little ahead of me."

Now though to ordinary mortals the University step in one's career is one full of honour and joy, yet for that great individual the head of the Eleven, and in the upper sixth of a public school, who has reached, as it were, the pinnacle of human glory, there is nothing left in life but to come down. The sets at college are too numerous, the amusements too scattered for any one man to have the universal renown of schoolboy days, and, accordingly, Walter Scrope was many pegs lower in dignity than when Tom had last known him at the awful distance of a lower boy, and he was admitted to the honour of intimacy in a way which surprised that modest youth. Scrope was a hard-working lad, a capital cricketer, and successful in scholarships and examinations, but he had begun to find out that the world was not quite the oyster, to open which had seemed to him so easy. Rather to Tom's surprise, his Easter invitation to Ferynhurst was gladly accepted by his friend.

It would have been difficult to define May's idea of what a hero should be, but it certainly was a shock when Tom introduced her to them all in the Ferynhurst drawing-room, both very blue with a five miles' drive in a dog-cart, in a sharp March wind. The hero's hair inclined to be red, and his features were by no means finely cut; he was strongly made and big, without grace or charm of any kind, and his manner was rough and full of corners. May sat down with a sort of pang while the introductions were going on; the ideal had had a great blow, yet not to like Tom's friend was almost a crime in her eyes.

"Let her dine with us to-night; it's

Tom's first day," said her father. "She's best in the school-room," answered her mother. It was a debate which often took place, and, as usual, her father carried his way.

At dinner, to Tom's great surprise, Miss Cecilia engrossed Walter. There was a flying hail of University slang to begin with, but the lads were rather quiet, and Walter, in spite of his independent manner, was not insensible to the charm of something approaching to flirtation with a young lady older than himself; it is an honour—a boy always prefers a woman to a girl.

"You never told us that Mr. Scrope's father was a brother of Lord Ardmore," said Cecilia to Tom, when they met in the drawing-room after dinner.

"No, didn't I?" said he indifferently.

"So you did know it?"

"Know it! Oh yes, I knew it—what did it signify? You'll never see his governor, he lives ever so far down in the north."

And no public schoolboy does think it "signifies" *who* a boy is, but *what* he is. Tom had now, however, reached a place where this blessed ignorance does not long continue; at college, connections are by no means indifferent.

Miss Cecilia, too, considered that it "signified" a good deal; it was by no means worth her while to expend her ammunition on the very heterogeneous material which her brothers brought to their father's house, but in the absence of older game, she had no objection to keeping her hand in upon anything well born, however poor, and though "only a boy;" and, to Tom's astonishment, his superfine sister relaxed and played a neat little game of flirtation for the rest of the evening. There is nothing which delights a boy on the brink of manhood so much. A woman can draw out what is in him, suggest topics, feed his vanity, and satisfy his curiosity as to that interesting and unknown subject—the natural history of petticoats; and Walter hung about her all the evening, hovering over the piano, listening to her music, playing with her worsteds, and the like.

"Hercules and Omphale," said the erudite Tom, but in a very low whisper; he found himself quite cut out; not that this troubled either him or May in any way; she had established herself in the corner of the sofa on which he was extended, nestling to his side, as he pulled her long curly brown locks out of their blue net, while she listened, with subdued peals of laughter (for her mother, half asleep, had remonstrated about the noise), to a fire of jokes

from Tom, the newest slang, dashes of college life, and was getting up the whole language of elisions and allusions—"greats," "the vac," "the long," "scratch fours," "ploughed for his smalls," and *id genus omne*. "'Quadrangle,' my dear!" shouted he, with horror, "you must say 'quad.'" Having just learned the tongue, he was naturally a purist; while his father, in an arm-chair not far off, was listening with a quiet smile on his face, nearly as much amused as his children.

"Did you ever hear such stuff, papa?" cried May at last.

"Never, my dear," replied he, drily; "we were strictly correct in our English in my day. We only said 'plucked for our little go.'"

Things went on in much the same way during the rest of Scrope's visit; except, when the lads were out walking or riding together, Cecilia claimed and monopolized nearly all his attention.

At the end of their visit, however, Tom, with an unconscious respect for May's judgment, inquired rather anxiously how she liked his friend.

"Oh, very much," she answered, stretching her conscience a little; "he's very clever, you know, and all that, but, Tom dear, I've hardly spoken to him, you see—he treats me like a little girl," she added, with the insulted dignity of sixteen "and-a-half."

"And pray what are you, I should like to know?" cried Tom, laughing. And there was no doubt of the painful fact, she looked like a little girl. She was short for her age, her clothes were made for use and not for show, and clothes have much to do with the impression of a "little girl." At this moment she was wearing an old gown of Cecilia's "raze," as Charlie the sailor called it. "Highty, Tightly, and Scrub" comprised her whole wardrobe, her brothers declared, and even that they were all "scrub."

That season Mrs. Dimsdale once more performed her pilgrimage to London; railroads as yet were only talked of, and she persuaded herself that the sacrifice was great in undergoing the weary journey. "Oh, you're sure to enjoy it—" "The labour we delight in physics pain;" "Hastings will look after you," said her husband as he put her into the carriage, having treacherously declared off at the last moment, and quite satisfied so long as she consented to leave May behind.

As a fruit of the effort, a marriage was soon announced between Cecilia and a Colonel Seymour, a good deal older than

herself, which had been hanging fire on both sides for some time.

He came down with them to Fernyhurst, and May was considerably awed by the politeness of her mature brother-in-law, who was, however, exceedingly kind to her, and indeed testified a more ardent desire to see her at their house in Curzon Street than Cecilia quite endorsed.

The wedding was all that was proper in every respect; the Dimsdales were on the whole a well-grown, well-looking set, and were all collected for the occasion; while Tom appeared, followed by his friend.

"How pretty you look, May!" said Charlie, as she appeared in her bridesmaid gear. It was her first compliment, and valuable accordingly. "I've always seen you in the pitchfork style of dress, you know. Why don't you always wear those things?"

"What, white tarlatane in the morning!" laughed May; "what a man's idea!"

"A woman ought always to wear white," growled Walter; "it's the 'whole duty' of women to be charming, and she fulfils that duty best in white."

May was extremely indignant at this irreverence, and showed it by refusing to speak to the delinquent during the rest of his visit; but he seemed provokingly even unconscious of her wrath.

Mrs. Dimsdale sang a song of thankfulness that her troubles of chaperoning were over, perhaps with a rather uneasy sense of unreality in her joy, when her husband hastily responded with, "You shall never be troubled with any duty of the kind with May, I'm quite resolved, my dear."

And now May, almost to her own surprise, found herself promoted to the post of young lady of the house, its dignities and responsibilities—no longer "a little girl." She did not, however, relish her grandeur, poor child, but was troubled by doubts whether she could do all that her duties included, and she lamented over Cecilia's loss in a way which her sister had not done much to deserve.

She had fewer of those pleasant times—half reverie, half reading—which had hitherto been her delight. "Missus wants you," or "Master's a shoutin' for ye, miss," was constantly invading her sanctuary in the old nursery, where, coiled up in an immense arm-chair, with a big book upon her knees, dreaming, thinking, preparing her work, some of her happiest hours had been spent. She was the darling of old "Nursey," the last of the large brood of chickens now left to the old woman, who still reigned in her deserted kingdom, holding sway over the linen generally of the family, and Master

Tom's shirts in particular. She was the only person of whom that worthy was afraid. She was a little woman, and Tom at least six feet high, but when she stood over him, as it were, by right of worth and moral superiority, as was the case one morning after his return home, and demanded, in serious tones, "And what's become of the two new shirts, Master Tom? I sent you off with twelve!" Tom almost trembled.

"She's worse than the flag-lieutenant," said Charlie, who was standing by during the ordeal, a little afraid that his own turn was coming, and with a conscience by no means void of offence on the subject of socks and silk handkerchiefs. "Holding a regular court-martial, May," he shouted to her as she went down the stairs; "making away with H.M.'s stores! Sentenced to be confined to his cabin for three weeks, and committed suicide in despair," he added, as he rode down the banisters like a whirlwind.

"Oh, Charlie, take care; how can you make such a noise? What will mamma say?" cried May, the infinite risk to his neck striking her far less than the fear of her mother's complaints of the disturbances which the boys made. Charlie's visits were always flying ones—come one day, gone the next, while his ship was in harbour or was paid off—and a general saturnalia was always the consequence. May was by way of practising at this time in the morning on the piano in the drawing-room, wherein her studies were much assisted by her two brothers, who now followed her in, chiefly, it is to be feared, because the drawing-room was forbidden ground.

"Well, Tom's lingo is much harder to get up than the Naval Cadet's examination," said Charlie, flinging himself, with a deep sigh, on the sofa after his exertions. "He's going in for Mods, and if he gets scratched for his Trial Torpids, he won't be ploughed for Smalls—that's right, isn't it, Tom?"

"Now, Charlie, you sat up all night to make that impromptu, you know you did," said Tom with a grin; "a man must speak like his neighbours—"

"A man!" shouted Charlie; "look at the 'man!'"

The moment was certainly unlucky. Tom was hopping steadily round the room, "taking his fences" very deliberately over all the furniture, a "bullfinch" over the sofas, a "rasper" over the chairs, and a "flat jump" over water, as represented by the rug.

Mrs. Dimsdale did not come down till late, and May's usually active little con-

science had been hardened by repeated crimes undetected and unpunished. She was now sitting laughing on a music-stool, with her back, alas! to the piano, when warning voices were heard in the distance.

Tom only escaped by a flying leap out of the window, while Charlie went out in a more dignified manner at the door, with his hands in his pockets, "close reefed for a gale," as he declared.

"What are you doing here, Charlie?" said his mother, rather sternly; "you know I want May to practise at this time in the morning."

"So she was just beginning, and we were helping her, mother. If she hadn't been very dull, she'd have learned the 'Ratcatcher's Daughter' before this, for Tom sang it, and I accompanied it on the Jew's harp. It was awfully jolly, mother; such a pity you weren't there to hear!"

Charlie was supposed to be the only person who could manage his mother, which he did by always ignoring her anger, and treating her as if she greatly enjoyed and admired all that he did.

"If that's all that May's doing, I think she might as well have come back and written those notes for me," said Mrs. Dimsdale, with rather a grim smile.

"Yes, mother, we'll all come and write the notes directly," said the boy, with his infectious good-humour, tucking her arm under his own as he spoke. "Just a bit of good steering, you see," he whispered, laughing, to May as they all went off in peace.

May was in great request with them all. There is not often a more happy being in existence than the daughter at home in a Squire's family in the country: there is plenty to do both for mind and body, and of the pleasantest kind. If there are a number of girls to divide the work, it is perhaps scarcely enough to cut into many parts, and the modern cry for occupation may have a good deal of reason, but for a single one like May, no position on earth can be more perfect. Her little feet went up and down the world busily as she helped her mother with her accounts and household management, read to her father, interested herself in the Alderneys and the draining, worked out under his orders his building plans and improvements, while as she rode about amongst the farms and cottages with him, she was concerned in the joys and griefs, the wants and wishes of almost every soul on the property. Moreover, she was the recipient of each brother's requirements and confidante of his scrapes—of the laments that Tom might not have

a horse, that papa would not pay for more promotion, or ask for Charlie's prolongation of leave, and generally and particularly, and at all times, of the complaints over the shortness of their allowances. "The governor hasn't the slightest notion how much a man *must* spend," said the soldier, the sailor, and the lad at college alike, in every variety of tone, and with a richness of illustration known only to the boy mind. While May, riding with her father, who saw, with a sigh, the old oaks felling to supply such enlarging needs, sympathized as keenly with the other side of the question. She was much younger than her brothers, but, somehow, she was erected into their counsellor and conscience, with an occasional sop to their own dignity, such as —

"You know, May, you *can't* tell anything about the matter; you're nothing but a girl." Or, "You're worse than a baby to say that. Why, I couldn't help it; it's perfectly out of the question for me to spend a halfpenny less!" Or, "Oh bother! I won't have you scolding in this way. I was *quite* right in it all; I know I was."

But in the end the sense, the sympathy, and the ready wit held their own, and the brave little heart and sound little head won the day in a curious manner, for they were as unconscious as she was herself how much the cleverest she was of the family.

Her sympathies had hitherto been pretty equally balanced, but this year Hastings, the Guardsman, according to the agreeable habit of some eldest sons, had informed the Squire that his debts must be paid either by his father or the Jews.

Mr. Dimsdale, who, though hard driven, had never owed a farthing in his life, was obliged to borrow — of which he had a horror — and to retrench, which at his age was very trying.

"I'm sure," said he, sighing, to his usual companion May, as they were riding together, "it's lucky that your mother can't go to London this year. (You know that's not what I mean. I'm sorry enough she's not well.) And now old Blucher's dead, we shall give up the four-in-hand. It'll be something not to have those beasts eating their heads off in the stable any longer. She won't like it at all, I'm afraid, but I don't believe she's used them five times in the last six months. I'm sure I don't know how to make both ends meet this year — we never do more than keep out of debt — and there are Tom's expenses double what they were. There must be another fall of timber in the Silent wood." And he sighed again, while May's young face flushed, and her

heart felt sore and angry for her father, though she said nothing as they rode on together under the lofty trees, the sun gleaming through the green leaves, under the interlacing of the great boughs, on the fern beneath, as he stopped from time to time to mark the finest of the timber.

CHAPTER III.

ARGUING.

MR. DRAYTON, the rector, was beginning, like his friend, to grow old. He did not object to the fact itself — his pleasant, homely, genial spirit found neither books nor men pall upon him, and he had the pleasure and interest of his friend's children without his anxieties — but to one consequence he did demur, — murmur, indeed, if so hard a word existed in his vocabulary. His sister "thought it her duty" to come and stay very frequently with him; and if there be anything very convenient to oneself and very unpleasant to others to be done, it is astonishing how useful "one's duty" becomes to some people. She had lately been left a widow with one daughter, who always, of course, accompanied her; and the poor old rector found life severe under the infliction. He was a kindly man, disposed to take a lenient view of divers aberrations which even then were beginning to show themselves in the Church, while Mrs. Longmore and her daughter were most strict in their orthodoxy. Their home was in the cathedral town not far off, where her husband had held some small preferment, and where "my uncle the canon" still ruled, greatly to the discomfiture of the unlucky mortals against whom that "gun ecclesiastical" was discharged continually by his lady relatives.

The pleasant Rectory, just without the park paling, with all the pleasure of its grounds, was a very enjoyable change from the cathedral close in hot weather; and Mrs. Longmore's "duty" to her brother became imperative many times this summer. It was not more than a mile from the "great house," where, of course, the doors were always open to anything which belonged to Mr. Drayton; there was a perpetual passing to and fro of the inmates; and though the Longmores were not popular at Farnhurst, yet a young lady is a young lady anyhow, and the boys amused themselves with Sophia when there was nothing better to be had.

She had "looked in" one day early, as usual, not altogether to May's satisfaction at the incursion which had taken place

twice already that week. She did not exactly dislike her; they were on that rather doubtful and difficult footing, "old friends," but it broke up the morning mercilessly. There is a certain kind of chatter, which, as there is no reason for either beginning or end, seems as if it might go on to eternity.

"Whose is that book?" said she at last, taking up one which lay open on the table.

"Mine," answered Walter, laconically.

"I'm surprised to see such a work here; it's very unsound," said Miss Sophia, aged seventeen, who, as a canon's niece, thought it incumbent on her to take orthodoxy under her protection.

"How distressed the Dean of — will be to hear that you think so!" observed Walter, gravely, but with a fantastic sort of grimace which came over his face when he was annoyed. "Is it principally with his historical facts, or the philosophical deductions from them, that you chiefly disagree, Miss Sophia?"

Sophia never could understand Mr. Scrope; she had not the faintest ray of intelligence of a joke, but she had a dim perception that Walter was laughing at her, and she therefore made her adieux and went out of the room "d'un air capable," as if she had rather distinguished herself.

"By all the powers!" shouted Walter as soon as she was out of hearing, marching up and down with his hands deep in his pockets, "isn't it the very coxcombry of absurdity? One wouldn't mind if it weren't a type of what's going on in the world. The chits, male and female, who can't spell the words in which the giant expresses himself, who puff themselves out like frogs, and say it's 'not sound,' he went on, somewhat grandiloquently.

"Well, but," said May, a little annoyed both at and for Sophia, "the Dean is a heretic surely. Dr. Atkins says that —"

"Heretic is from *αἵρεσις*, to choose," answered Walter, sententiously; "and to choose in opinion is the faculty which distinguishes a man from a beast."

"And if he chooses wrong?" said May, shortly.

"You may happen to stand still wrong, if you think choice wrong," replied he. "If Luther had been afraid of *αἵρεσις*, to examine, to choose, you who think choice wrong would have been a Roman Catholic to this day, Miss May. Free thought!" said the young fellow, throwing out his arms to their full extent, a sort of compromise between an enthusiasm and a stretch, in his boyish fear of the ridicule of

much feeling, "to fancy free thinker being a term of reproach — the finest thing that a man can do!"

"You're not admiring Tom Paine & Co., I suppose?" observed May, a little superciliously.

"How you two always will misunderstand each other! you know he doesn't mean that," said Tom the peacemaker. "I can't think how it is you quarrel about everything."

"Women like their clothes and their opinions orthodox," went on Walter, without attending to him, "and if any one says that their bonnet is ugly, or their opinion is against every fact of history and philosophy, they think it's quite a satisfactory answer to say that Madame Thingummy made the one, and that Dr. Bumble holds the other; they delight in Popes!"

May opened her mouth to reply in wrath, but her father's voice was heard in the hall calling her, and she went off to him at once.

"I wish every woman was made to read logic. I would have every girl of them drummed through a chapter of Mill every morning," said Walter, rather savagely, as she left the room.

"Hear him!" laughed Tom; "the great cynic who declared it 'the whole duty' of woman to be charming, and dress in white in the morning, not a year back! The want of logic can no further go!"

"Consistent! No, to be sure I'm not! I'm learning. What are we put into the world for, I wonder, but to learn? Because I talked nonsense when I was twenty, do you mean I'm to go on keeping to it till I'm sixty, in order to be what you call consistent?"

And Walter laughed rather angrily, for the example of his old thesis, the concrete essence of his proposition, appeared fair and living at the door: Cecilia herself came sailing in, fulfilling certainly to the full the whole duty of woman in one sense, her gown perfect in colour, fashion, and fit, the face and figure it contained almost as good as the gown, *pimpante, avenante, prévenante* — there are no English words to express her — charming down to the tips of her fingers, and quite ready to be charming to him.

He did not like her — now — gave an impatient snort and an unintelligible reply to the playful nothing which she threw at him as she passed, and went out of the room.

"What makes Mr. Scrope such a bear this morning?" said she wonderingly. "Colonel Seymour says that he's thought

very clever, but so odd that he never will do anything."

"Do anything" means succeed in life in the Cecilian vocabulary. Walter was doing a great deal for himself and for others. He was learning, as he said, but it was in an uncouth slow way; his was what would be called in a certain kind of slang "a big inarticulate soul." He had a large heart and a large brain, but he could not express his meaning either by word or action; he was full of corners, rubbed everybody the wrong way, so that few people liked to act with him, and his rugged talk produced antagonism instead of assent. He had little imagination, and could not place himself mentally in the place of others and see their difficulties, or consequently explain his own. It is a suffering temperament—

"As it is, I live and die unheard

With a most voiceless thought, sheathing it as a sword."

He was reading for a fellowship, on which he intended to live while working hard at his law in London. His father's fortune was so small that he did not choose to take any help at his hands, and he led a very ascetic life, coming down occasionally to Fernyhurst as one of his few pleasures.

"How wet and tired Mr. Scrope looks, and, Tom, you're quite dry," said May, on one of these occasions, as they came in from their journey down from London on a wretched winter's evening.

"Wet! No wonder, stupid fellow! He chose to get outside the coach in this pelting rain, because we took up a woman in a thin gown, and no cloak to speak of, and he gave up his place inside to her. I had the pleasure of her company as my neighbour all the way to Danesbury 'all along of' him," said Tom.

"That fat old woman would keep the window up on my side. I was sitting back, and it made me sick," growled Walter as he went out of the room looking annoyed.

"Oh! so that was the reason, was it? It was all an abominable piece of self-indulgence," shouted Tom after him.

"What kind of a woman was it?" said May, curiously, after he was gone.

"A sort of a kind of old maid-servant, I should think by her looks," answered her brother.

CHAPTER IV.

COMING HOME.

"So Lionel landed on Tuesday, I hear, from Brickwall," said Mrs. Dimsdale, one morning at breakfast as she opened a let-

ter from her sister. "I'm glad she's got her son back safe at last, after all these years."

"Yes, Clara and Amy have been in such a way about it," observed May; "they thought the ship must have gone down, they were so long without hearing from him."

"Stuff and nonsense," cried Tom; "why should that ship go down more than any other, I should like to know?"

"I'm glad it wasn't this one, however," answered his father, with a smile. "You'll write and ask him here, my dear?" he went on, turning to his wife. "I should like to hear a little about the Cape, and I used to like the lad, though he's been gone so long that one has nearly forgotten him."

"And tell the girls that he must make haste and come before my time at home is over," added Tom to his sister.

Lionel Wilmot was the son of a general officer of small estate, about thirty miles from Fernyhurst, who had married Mrs. Dimsdale's sister late in life, after seeing a great deal of service, and with a bullet knock on his head, which had sunk his later years into an uneventful invalid existence, leaving a very large scope to his wife's energies, which were great. He had lately died, and his soldier son, who had been away with his regiment, with but one short interval, for the last six or seven years, was now returning to put his father's affairs in order, and arrange matters for his mother and two young sisters. He had always shown himself an exceedingly good son and brother, and had done everything in his power for their comfort provisionally from a distance. His return was of course a great event to them; he had been away so long that he seemed almost like a stranger.

Brickwall, his patrimony, was the very pink of propriety—an old red-brick house, with stone quoins and bits of balustrade, in a proper little park, standing on a tidy little hill, with the church close behind on one side, and a capital square kitchen-garden wall on the other, girt in with a number of good trees, not, however, large enough to be fine, which would have been out of keeping.

May had always felt inclined to gape as soon as the first of its neat iron fences broke upon her view. As a child, her visits had been a terror to her aunt, for she led her two tidy little cousins into all sorts of iniquities; they dirtied and tore more frocks in the few days of her stay than in the whole course of the year besides. May was dreadfully inventive and active; out of doors she made dams and water-mills in the

stream, and indoors built up half the school-room furniture into "houses," to the horror of the governess. She was found one day declaiming to them the passionate love passages in *Romeo and Juliet*, of which the music and the images had struck her fancy, though the meaning was far beyond her. Another time it was "One more Unfortunate" which some one had read before her out of a magazine; whole cantos of Walter Scott, scraps of Spenser, with absurd bits from Charlie's songs and Tom's Pickwickian extracts, came pouring out in wonderful juxtaposition. Altogether, it was much more entertaining than Pinnock's Catechism and Cowper's Poems, which was the diet on which the girls were usually fed, and they worshipped her, to their mother's infinite disgust. Lionel had been away so long that May only remembered him as a tall boy, who used to tease her and insult her dignity by calling her a tomboy.

"How very good-looking Lionel is!" said Mrs. Dimsdale one evening a day or two after her nephew's arrival at Fernyhurst, when he had left the room to fetch some bulbs which he had brought home for her from the Cape.

"And he's got as good a head on his shoulders as I have met for some time," observed his uncle. "He's told me more about the difficulties of the Dutch and English law with the Kaffres and settlers than I ever knew before."

"And he shoots as straight as any man in England or out," went on Tom, with considerable respect for a tall cousin who had seen so much of the world.

"Good night, Lionel," said May, taking the candle which he had lighted for her, and shaking hands in very cousinly fashion at the door which he had opened.

"Did you generally do the civil in the wigwams at the Kaffre dinner-parties, Lionel?" Tom called out with a smile from the bottom of the arm-chair where he was ensconced.

As May went up-stairs she also observed to herself how agreeable he was; how much pleasanter than Walter Scrope; he never asked her, when she solved a question by some pretty poetic platitude, whether it was true or not; or declared that no amount of lofty sentiments could make two and two into five; he listened to her; he did not always by any means agree with her, but he gave her argument its very fullest value, and even sometimes put it into better shape for her.

"Whereas Mr. Scrope knocks people down and treads on them afterwards," she said musingly to herself. "I don't like talking to Walter, he's very overbearing," she went on, almost aloud, as the contrast came before her, and she stopped on the landing of the dark, polished old oak staircase in the energy of her distaste.

SPECTRUM OF THE FIRE-FLY.—MR. C. A.

YOUNG has described in the *American Naturalist*, the spectrum given by the common fire-fly as being perfectly continuous, without trace of lines, either bright or dark, and extending a little above Fraunhofer's line C in the scarlet to about F in the blue, gradually fading out at the extremities. It will be observed that this portion of the spectrum contains the most luminous rays, the caloric and actinic rays not being brought materially into play. This insect, therefore, has the power of generating only those undulations whose velocities are such as to affect most powerfully the organ of vision, and in this respect is a remarkable adaptation of force to precisely the object to be attained. In all devices for illumination by artificial means, many waves moving both slower and faster than those required, are simultaneously generated, so that but a small portion of the radiant energy exerted is made available to human vision. Yet it may be doubted whether any strong and ser-

viceable light can be produced without a simultaneous generation of the whole range of undulations, from the slowest to the most rapid, as found in solar rays.

SALMON, it appears, are found in great abundance on the Pacific coast. The *San Francisco Bulletin* says, "From Mexico to Alaska every clear stream running into the ocean is frequented by salmon. These fish even ascend small streams which one can jump across, and the number which frequent large streams is wonderful. The size, quality, and shape vary considerably in the different streams, the largest being caught in the Sacramento river. While the salmon theoretically must have clear water, it is remarkable that it seems to thrive in the muddy waters of the Sacramento." Here is possibly some news for Mr. Frank Buckland.

From Temple Bar.
BEHIND THE SCENES.

'Tis the world sufficiently grateful to Mr. Samuel Pepys, F.R.S., for that little book which he wrote just 200 years ago? That "Diary" which he kept from day to day, for nine years, for his own behoof, in cipher, and which remained a hidden treasure for some century and a half—frozen up like the music in Baron Munchausen's horn—until the discovery of the cipher used suddenly dissolved the spell, and the long imprisoned story became audible by mortal ears?

It is a work which appears to me never enough appreciated, whether we regard it in either of its three-fold aspects: as a contribution to the history of an eventful period—or as a picture of the manners of the time—or as the anatomy of a human heart, full of vigorous pulsation, laid bare for our keenest examination. For, be it observed, it differs *toto cælo* from all histories of England with which we are acquainted; and, indeed, from all histories whatsoever. Those interesting and veracious works are commonly written either by some partisan—who writes, if not with malice aforethought, at least to demonstrate some foregone conclusion, and of course takes care to suppress all that makes against his theory—or else they are the much more valuable memoirs of some actor in the scenes described, but who chronicles them confessedly "to be seen of men," and never forgets to paint the picture in a light favourable to himself. But Mr. Pepys' pictures are entirely free from all suspicion of this fatal defect, inasmuch as they were not painted to lead, or mislead, others, but simply and only as a record for himself; and so soon as he found himself no longer able, from failing sight, to keep his diary in cipher, he very wisely ceased to keep it altogether.

So, as regards the other aspect of the book—the dissection of his own heart—it presents the greatest possible contrast to the so-called "Diaries" which vain and silly people inflict upon the world; and in which, under pretence of self-examination and self-condemnation, they contrive still to boast and vapour and belaud themselves; a class of books which drew from Hannah More the remark that, rather than not talk about themselves at all, people would even consent to abuse themselves. Mr. Pepys is entirely free, I think, from this charge; except, at least, in so far as poor human nature is apt to endeavour to deceive its very self as to its motives of action. But, generally, our diarist expounds his motives with the most delightful candour. Witness the

entry on his journey home from Brampton, whither he had gone to bury his uncle. Stopping at Hatfield on his homeward ride, he strayed into Lord Salisbury's great house, and was followed by "a pretty little dog, which I would fain have stolen, *but could not*, which did trouble me!" he adds, with exemplary truth. Most charming contrast with the class of maudlin diarists whom I have condemned! They would never talk of "stealing" the dog, not they! They would have declared that the poor little dog seemed lost, and looking for some kind owner, and they felt almost induced to take it home "out of charity," or some pretty little fiction of that sort.

The candour with which Pepys relates this, and other similar stories which tell so strongly against himself, gives us, I think, good reason to believe that the public events which he chronicles are stated with equal truth, and that the pictures he has left us of the notabilities of that day, and the manners of the time, are painted with a faithful brush. And, let me add, very few of those who "made the history" of that period were unseen or unnoticed by those observant eyes. Very many of the actors in the historic drama passed in review before him:

"Conquerors and kings—
Bards, sophists, statesmen—all unquiet things
Which stir too strongly the soul's secret springs,"

were most of them seen by him, from the king upon his throne down to the poor starved sailors, whom that same king cheated out of their wages and left to die in the streets. During the time of Pepys' secretaryship to the navy, the Duke of York (James II.) was Lord High-Admiral, and, as he lived at Whitehall with his royal brother, Pepys was brought into constant communication with these two last Stuart kings. In those days a king *was* a king, and the loyal secretary observed the sovereign most anxiously; evidently in the hope of seeing some divine effulgence beaming forth from the royal presence. It is true that as he got to criticise the merry monarch more minutely, when his eyes had recovered from the dazzling effects of his first appearance, he began to suffer from troublesome doubts whether, after all, "conquerors and kings" were really made of less "penetrable stuff" than the rest of mankind. And how naively he confesses his disappointment on hearing these two Stuarts converse in the royal barge returning from Woolwich to London, when he had the supreme felicity of increasing the weight of that august freight by sitting close to the door of the cabin, or "coach," as I fancy it

was called in those days, and "of seeing and observing their manner of discourse," no doubt with the greatest possible interest. "And, God forgive me!" he adds, "though I admire them with all the duty possible, yet the more a man considers and observes them, *the less he finds of difference between them and other men*; though, blessed be God! they are both princes of great nobleness and spirits!" evidently trembling, as he says it, at his own audacity in presuming to see no such difference! "Curse not the king, no, not in thy chamber," says King Solomon; "for a bird of the air shall carry the matter," and Pepys seems to fear that the secret ciphered in his diary might escape like that once whispered to the reeds touching the length of King Midas' ears.

Yet I think he gave most convincing evidence of his loyalty and attachment not only to the Crown, but to the very *person* of royalty, when, on Shrove Tuesday, in 1668, he "did see by particular favour the body of Queen Catherine of Valois; and I had the upper part of her body in my hands, and I did kiss her mouth, reflecting upon it that I did kiss a queen, and that this was my birthday, thirty-six years old, that I did kiss a queen." This was Henry V.'s queen (Prince Hal's "Kate"), who had been buried 211 years before (in 1457), and her body, exposed by some accident in rebuilding a part of the abbey, was kept in a certain chest until 1776, when it was re-buried. Talk of attachment to the throne and person of a sovereign, this was devotion with a vengeance! What would the squeamish loyalty of 1870 say to such a test? Shakespeare makes Henry declare that there was "witchcraft" in his bride's lips, and surely it must have been so, if they retained their attractiveness for more than 200 years after death!

Nor was his belief in caste confined by any means to the throne, but it extended downwards through all the successive ranks; and nothing excited his indignation more violently than to see one of these ranks invading another. Thus when Creed, his junior in the service, proposed to marry Mrs. Betty Pickering, niece to his patron's wife Lady Sandwich, he records his horror at "his devilish presumption in aiming at a lady so near to my lord," and, in point of fact (for that is the head and front of his offending), so much above the rank of Pepys' own wife. Creed, however, appears to have shown no sign of penitence for his offence. He not only "aimed" at Mrs. Betty, but appears to have hit her and brought her down, and they were shortly afterwards married, though the lady affected

at the moment to turn up her nose at him. And this belief in caste was carried by Mr. Pepys into matters of graver moment; so that when the parson at Brampton Church, on seeing him enter, commenced the general exhortation with "Right worshipful and dearly beloved," he evidently thought it quite right and proper. Like Cassio, he had no objection that the ensign should be saved, "but not before the lieutenant," by any means!

I wonder what the servants of the present day would think of the manners and customs of the masters and mistresses of the seventeenth century? Although he was neither an ill-natured man, nor a severe master, Pepys seems to have thought nothing of inflicting corporal chastisement upon his household when he thought it was needed. Having been for some time troubled by the conduct of his boy Tom, he adjourns with the culprit and a rod into a room at the top of the house looking towards the garden, and there he "did soundly beat him," he says, "after first reckoning up his faults to him;" but, owing to the lightness of the rod, he adds, that he hurt himself much more than the boy: for, being unaccustomed to such athletics, his own right arm was so sore within fifteen minutes of the operation that he was unable to move it! A result which must have given Tom the liveliest satisfaction. Nor were such little attentions confined even to the baser sex in his household, for coming home one day and finding "the door left open by Luce, our cookmaid, it so vexed me that I did give her a kick in our entry, and offered a blow at her: and was seen doing so by Sir Wm. Pen's footboy, which did vex me to the heart, because I know he will be telling their family of it." And on another occasion, discovering that his cookmaid had let in a "roguing Irish woman" to help her in cleaning, he made his wife beat her soundly, and then shut her down into the cellar all night, as a trifling reminder not to do it again! Fancy the domestics of 1870 being treated in this fashion! would not Mr. and Mrs. Pepys soon have found themselves in the cells of the nearest police-station, and would not the *Daily Blunderbuss* have crashed its thunderbolts on to their devoted heads? Thank God that it is so, that those good old times have passed away for ever!

Not that the domestic picture must be painted altogether in dark colours, for within two days of his onslaught upon Luce we find him taking his wife and two of his maids out a-pleasuring to the "Jamaica House," where "the girls did run for wa-

gers over the bowling-green;" and we find him often of an evening sitting in his kitchen, with his wife and her maids, cracking jokes and chaffing his servants with the most entire *abandon*. Nor need we forget that in his childless and wifeless old age, when his life-work was over, he retired to the seat of his old friend and servant, William Hewer, at Clapham, where he was treated with the utmost respect and kindness until his death, some three years afterwards. And we hear him, in the diary, speaking of the return of a former servant, who "comes by force away from her other place," to be again with her old master and mistress, in terms of almost caressing affection.

It seems to me that his skill in pen-and-ink portraiture has never been sufficiently admired. With what graphic force, in a few vigorous touches, he often puts the likeness on his canvas. Witness his photograph of Tom Bates, a "prating, bold counsellor, . . . noted for a great eater and drinker, not for quantity, but of the best;" could Chaucer himself have painted the man of law in livelier colours? Do we not all know him — this prating, bold counsellor, whose jaws, between talking and eating, get no rest — nor his hearers either? Sergeant Buzfuz is more elaborate, but hardly more lifelike than "Tom Bates." Sir John Duncomb again, the newly-made minister, may hang as a pendant to the barister: "To the Treasury Chamber. Here I saw Duncomb look as big, and take as much state upon him, as if he had been born a lord." Is not the new Lord of the Treasury present to our eyes, with all his blushing honours thick upon him, puffing himself out, like the fabled frog, to the full size of the political ox, giving himself all the airs of one born in the purple?

Vandyke's stately canvas shows us with what imperial dignity and grace the first Charles upheld his order, and Lely and Kneller, *longo intervallo*, present to us with sufficient fidelity the periwigged Mohocks and exuberant Magdalens in whom his son delighted. But Mr. Pepys tells us not only how they looked, but what they did. He tells us how, by Charles's early rising (at five A.M.), he tired out all the lords-in-waiting and people about him, — what an excellent tennis-player he was, beating his loyal subjects at that game, — how admirably he danced, much better than his brother James; — and how it was the etiquette of his court for every lady present at his great balls to stand up during the time that the King was dancing. On the other hand, the portrait of him, when at work, is not so

flattering; for at the Council Chamber, during their sitting, "all I observed there was the silliness of the King, playing with his dog all the while, and not minding the business, and what he said was mighty weak."* And, again, at Saxham, "the King was drunk with Sedley, Buckhurst, etc., the night that my Lord Arlington came thither, and would not give him audience, or could not."

So during some great political crisis he is found in Lady Castlemaine's apartments at midnight, surrounded by his usual *entourage* of Nymphs and Satyrs, all in hot pursuit of "a poor moth," which they are trying to get some sport out of; and during one of his royal progresses through the country, we read "how the King and these gentlemen did make the fiddlers of Thetford to sing them all the obscene songs they could think of." How Pepys' mind must have reverted to the day of Charles's landing at Dover, when he took the Bible presented by the Mayor, "and said it was the thing that he loved above all things in the world!"

"A marceiful Providence fashioned us holler
O' purpose that we might our principles
swaller,"

sings Mr. Biglow: and certainly Charles seems to have swallowed his professed principles pretty effectually!

The chronicler's opinion of the King's character, as shadowed forth in the Bible scene, seems to have suffered some little shock in the *fracas* which occurred at his coronation, when he had no sooner reached the steps of his throne than his footmen seized upon the velvet and gold canopy of state which had been borne over his royal head by the barons of the Cinque Ports, and tried to "loot" it for their own personal benefit. The barons, however, held on nobly, the footmen continued their attack, by main force dragged their lordships down to the lower end of the Hall at Westminster, and would certainly have been victorious, had not one of the heralds present cleverly closed the door, and so prevented their egress with the spoil. What an edifying spectacle — in the very presence of the King, on the most solemn ceremonial occasion of his life — to have a mob of lords and footmen struggling and fighting all through Westminster Hall for one of the badges of his state! It is true that the turbulent serving-men were speedily dismissed

* Rochester's stinging quatrain must be confined to the "chaff" of his lighter hours. That he "never said a foolish thing" had no reference to his dicta at the Council Board.

from the royal service; but the poor barons, all blowed and hustled in the unequal combat — out of breath and out of temper — found, on their triumphant return with the canopy, that the banquet-table specially designed for them had been most unjustly seized by the "bishops, judges, &c.," and their discomfited lordships were forced to eat their dinner below the masters in chancery and barristers! —

"Vanitas vanitatum, omnia vanitas!"

What dark visions of revenge must have floated through their minds as they took their seats below the salt, re-adjusting, as they did so, the coronets knocked off in the scuffle, and the stars and garters which they had shed around them in their meteoric flight adown the hall! How bitterly they must have cursed John Thomas and all his works, and how devout must have been their hope that the dinner so shamelessly eaten by the bishops and judges might disagree with those dignitaries!

What would the Court Newswoman, I wonder, have said about this little scrimmage in his official account of the coronation? Luckily for Charles and his subjects that functionary was yet in embryo. There was no "walking on the slopes" in those days. The only slope which the king affected was the *facilis descensus Avernus*, "the primrose path which leads to the everlasting bonfire;" and there was no need to tell the people that their lord and master had been taking his usual exercise upon that declivity the day before, as they were too well aware of the fact already. But Mr. Secretary Pepys is worth a thousand Court Circulars. Those records would have given but the dry bones of the statement, whereas he breathed into them the breath of life, and gave them colour, and warmth, and movement. When Charles dined in state with the Dutch ambassador (Feb. 1668) the official Yellow-plush would but merely have stated the bare fact — adding that "His Majesty was attended by Lords Rochester and Buckhurst, the lords in waiting, Sir Charles Sedley, and Mr. Thomas Killigrew, &c., &c.," but Mr. Pepys tells us something more than this, he informs us that "after dinner they drank and were pretty merry" (which appears very probable), and that Mr. Killigrew chaffed my lord of Rochester to such an extent that his lordship boxed the wit's ears "in the King's presence." His Majesty being graciously pleased to condone the slight indecorum. And this, be it observed, is not at a snug little supper in Mistress Eleanor Gwynne's lodgings, or at a gambling orgie in the gilded saloons of Lady

Castlemaine, but at a solemn banquet given to Charles by the ambassador of one of the great European powers, the weight of whose cannon the English fleet had often felt. How astonished must have been the sedate Mynheer Von Dunk to see two of His Majesty's attendants — one of them a belted earl — boxing each other's ears like two drunken sailors in a Dutch *lust-haus*! What a dispatch he must have written home of the whole affair! No wonder that Charles's ministers at foreign courts declared that they were respected much more in the grim Protector's time! On the other hand, the foreign ambassadors themselves don't seem to have been very particular. On some great ceremonial occasion the representatives of France and Spain had a little difficulty about precedence in their carriages of state, and proceeded to a free fight in the open streets, in which several men and horses were killed on both sides, the King wisely declining to interfere. Pepys praises the wisdom of the Spaniards in shooting down the horses in the French carriage, whereby Louis le Grand's minister was left high and dry in the street, framed and glazed, but bereft of all power of motion. The Spaniards had previously lined their traces with iron, to prevent severance, for the whole affair was very deliberate, and known to be impending.

Other great historical personages pass through our diarist's pages. The fiery Rupert, who was so "so severe in council," and so prodigate in life and conversation, frequently appears; and George Monk, Duke of Albemarle, is presented to us with his "nasty wife and nasty dishes." The roughness of the Cromwellian's domestic *ménage* reminds one of the accounts of the households of some of Napoleon's marshals, with their baggage-waggon wives, whose resonant titles contrasted strangely with their *vivandière's* vocabulary — not the only parallel, by the way, between the Reign of the Saints and the First Empire.

But the historical value of the diary is eclipsed by its worth as a picture of the manners of the time, and by its curiosity as a psychological study. The way in which the diarist records not only the great events of his life, his various public offices, successes and disappointments, but all the thousand trifles which make up the sum of daily life, down to the combustion of his "perriwig," which caught fire behind, and frizzled so that "no one could tell what the noise was," and to the "washing of his ears" by one or other of his servant-maids, and the severe cold which he caught in consequence, make it a most elaborate record

of his own career; whilst the candour with which he confesses not only his peccadilloes, but lays bare even his minutest motives of action, and shows that the motive professed was not always precisely the actual reason, combine to render it almost unique as a study of "poor human nature." Some years ago the anatomists of the day had the chance of looking into a living stomach, and observing all its workings; part of the outer wall of the organ having been shot away, and the body healing with an orifice sufficient for the purpose. They were able to gauge its powers of digestion of different sorts of food, and to note how it "behaved"—as chemists say—under various circumstances; how stimulants, or mental emotions, turned the mucous membrane of a bright red colour, and so forth. In like manner, Mr. Pepys has with his pen removed a portion of the outer wall, not of his stomach but of his heart, and through the aperture so made we may see all its workings—its hopes and fears; its joys and sorrows; its pride and humiliation; its loves and hatreds; not the mere outward manifestations of those feelings, but their very existence in his heart of hearts.

One of the most humorous—yet one of the saddest—of these records is the history of his wife's jealousy and the trouble it occasioned him. Never, perhaps, was a picture of the working of that dread passion painted with more perfect skill—never was a demonstration of morbid anatomy more complete; and, as we read it, the whole drama unrolls itself before our eyes. He was, I believe, really very fond of his young and pretty wife; but I fear that he gave her some reason to doubt it, from the natural gallantry of his character, and his devotion to *le beau sexe*, one and all. Like Mr. Snevellicci, he "loved 'em all, sir;" but I think, on the whole, Mrs. Pepys paid him off pretty handsomely. She contrived to make his home so warm, that towards the end of the "Diary" we find him, after one of these little matrimonial tournaments, going "to bed, weeping to himself for grief;" and, a few pages on, he cries out in the anguish of his soul that he "can no longer endure this life."

Nor did his good lady always confine herself to the usual female armoury of snarls, and sulks, and sighs, and tears. Upon one occasion she declined to retire to rest at the usual hour, and he was obliged to leave her sitting up. But, happening to wake about 1 A.M., he found her approaching his side of the bed "with the tongs red-hot at the ends, as if she did design to punish me with them;" evidently intending to seize him by

the nose, as St. Dunstan did to his adversary! Upon this Mr. Pepys prudently skipped out of bed and induced the fair combatant to lay down her arms; but I think he must always have felt some little uneasiness afterwards when bedtime came. The method in which he carried himself throughout this campaign is admirably described. His mode of warfare seems to have been to soothe her at the time, and, some twenty-four hours afterwards, to pick a quarrel with her about something else, and then rap her well over the knuckles—a mode of procedure which I think I have observed elsewhere. But, altogether, she appears to have pretty much carried her point, and made him feel, if not see, the error of his ways. Sometimes, unhappily, when he had been chastised into repentance, and all was smooth, the actress, Mrs. Knipp, who was the chief apple of discord, would by evil fortune wink at him in the middle of the play, and as Mrs. Pepys sat watching him instead of the stage, his answering smile would be at once detected, and hostilities would recommence with redoubled violence.

By no means the least amusing part of the "Diary" consists of the chronicler's experiences of church-going; for however hard Mr. Secretary had been at work during the week, he very rarely missed attending his parish church, or some other, once or twice on the Sunday. He heard most of the preachers of his time from Stillingfleet and Calamy down to the Rev. Mr. Logge, whom we all know so well, and who like—

"Mr. Parker
Makes that darker
Which was dark enough without."

And whose "dull, idle sermon" he seldom fails to reprobate. But I am sorry to say that his own conduct in church was not entirely free from possible objection, for he constantly alludes to the "great store of fine women" in the church as one of its attractions, and sometimes even his constitutional gallantry appears to have broken out in rather an unseemly way. On one occasion, finding himself seated near a young lady of prepossessing appearance, he so far forgot the *genius loci* as to attempt to take her hand; but she modestly received this little advance "with a pin," which speedily cooled the ardour of her assailant—a method of reception which I would recommend to other maidens who are annoyed by unwelcome attentions from married men! Although of so gallant a temperament, Mr. Pepys appears to have been sometimes wanting in politeness, as when his pew, having

been entered on several Sundays by a lady who he thought had no right of entrée, he "did set his breech against the door," and in this unceremonious fashion prevented the threatened interruption. But, I think the flower of his church-going adventures was when upon a certain Sunday he attended some distant church (Battersea, I fancy), and being exhausted with his walk he dropped asleep during the sermon, and let his hat fall through a hole in the flooring of the building. This untoward accident compelled him to remain behind after the dispersal of the congregation; when the verger and himself, after many efforts with a long rod, fished out the recalcitrant beaver from under the boards. I should like to have seen his face during the operation; it would have made, I think, a charming picture.

It is curious to observe the change in manners since the diary was written. We scarcely realise now the fact that the House of Commons at that time sat at 7 A.M., and rose, for the day, at noon. The diarist's grand dinner party, when he entertained his patron, Lord Sandwich, and other nobles, took place at noon precisely, and his titled guests left at 7 P.M., tired enough. I should fancy, with a seven hours' *sedentary*. Again when he goes to call on Lady Batten, the wife of one of the commissioners of the navy—a vice-admiral and M.P.—he finds that lady in her bedroom at high jinks with some other ladies, "mighty merry," as he expresses it. After the usual interchange of compliments one of these "ladies" seizes upon the caller (the Secretary to the Admiralty!) and throws him down upon the hostess's bed, where she and the rest of the fair bevy proceed to roll upon him! Imagine the scene in a formal call upon a lady of position! Well, like Molière's doctor, we have changed all that! We may not be more moral in 1870, but we are certainly more decorous.

On another festive occasion—the anniversary, I think, of Charles's coronation—one of Pepys's female guests, at the banquet he gave, filled one of the empty pie-dishes, which held fully a pint and a half, with sherry, or some white wine, and drained it at a draught to the health of His Majesty! If this be not *effusive* loyalty, I know not what is!

Nor must it be supposed that these were the doings of the lower orders. Mr. Secretary had by this time become a very considerable personage, and was living in very good style and with very good people. He kept his carriage, had a table-service

of plate, and luxurious meals, his portrait was painted by Kneller, and the walls of his room adorned in panel with four paintings, by Dankers, the king's landscape-painter, of the four royal palaces. He entertained a profound objection to "common people," and was especially careful, as he climbed the ladder, to avoid all possible association with them on a footing of equality, although he countenanced them *en grand seigneur*, and graced his servants' marriages with his respected presence.

Another feature of the time which strikes one is the frequent use of the stage for the indulgence of private pique or political satire; and the rapid vengeance with which the upper ten thousand avenged their wrongs by taking the law into their own hands. A leading actress was induced by one of the frail tenants of Charles's zenana to caricature her rival, and was immediately clapped into prison by my Lord Chamberlain, who happened to be a kinsman of the aggrieved lady. Sir Charles Sedley is imitated in his dress and manner by a favourite actor, and forthwith employs two ruffians to beat the audacious artist into a jelly, whereby the cast of the play is spoilt. And here the King comes upon the stage: for although Charles bore the distress of his subjects with great philosophy, he felt his own personal annoyances acutely enough; and so he flies into a violent passion at this untoward accident. *Le Roi s'amuse!* and let no one presume to interfere with his royal pastime! In like manner, although he scarcely listened to the words uttered by his ministers at the council board, his critical ear immediately detects the want of time kept by the "fiddlers" in his theatre, and he forthwith stops their performance. Straws such as these show, better than any history, the current of the royal life; and prove, spite of his apathy and carelessness about state affairs, how jealously he catered, not only for those coarser indulgences which we are apt to associate with his name, but even for the more cultivated and intellectual enjoyments of his free and easy life, and how loudly he cried out if he found any crumple in the rose-leaves of his voluptuous couch.

But to return to our diarist. If his private life partook somewhat of the fashion of the time, at least his public service was above all praise. At a time of unparalleled idleness and profligacy he was one of the most hard-working of men, sparing neither time nor labour nor eyesight (which was nearly destroyed) in protecting the interests of a sovereign who was too idle and too luxurious to give the matter a thought.

Early and late he was at his office, not only working hard himself, but, by his energy and example, making others, for very shame, work too. He has often been accused of cowardice, but during the panic of the Great Plague of 1666, when London was literally deserted, and the mortality of the then small city rose to 10,000 a week, he showed the greatest possible pluck, sending his wife and all his people down to Woolwich for safety, but sticking manfully to his own desk in the plague-stricken city, saying, with modest courage, that as the king's other servants took their share of danger in the wars of the period, he must not grudge to serve his master by the risk of his own death from pestilence; a much more trying test, by the way, than a mad charge in battle-field. "But every man," said some one noted for bravery, "would be a coward if he dare;" and courage seems, after all, to be somewhat a matter of education. Although Pepys, day after day, looked death calmly in the face at the plague-time, he would have made but an indifferent member of the Alpine Club; for, visiting the castle ruins at Rochester, he says: "But, Lord! to see what a dreadful thing it is to look upon the precipices, for it did fright me mightily!" And going down to Chatham with some colleagues to hold a court-martial, he listened to ghost-stories till he was afraid to go to bed alone, "only that he durst not, for shame, say so," he candidly adds.

I believe him to have been, in the main, a good man. He was a dutiful son and brother, a kind master, and not a bad husband. As a public servant he had few equals, or none. He lived a full and vigorous life; hard at work in the morning, he constantly attended the theatre afterwards;

he lived with all sorts of people, and saw all sorts of sights, from the execution of brave Sir Harry Vane on Tower Hill to the suffocation of a "kitling" by the Royal Society; from the picturesque coronation of his royal master, down to the performing monkeys at Bartlemy Fair and the exhibition of the fat giantess. Soldiers and sailors, artists, "virtuosoes," actors and doctors, ladies of all degrees, all in their turn pass through the panorama of his pages, and are painted, as they pass, with a ready, forcible pencil. John Leech himself never, with a few pen-and-ink strokes, seized the characteristics of each class and rendered them immortal, better than does Mr. Secretary Pepys; and, for myself, I feel deeply grateful to him for what he has done, and regret only that his failing sight compelled him to desist so soon from his work, and to leave his gallery of portraits incomplete.

But touching the most interesting portrait in the book, the picture of himself and the anatomy of his own heart, I would only suggest that when we look at the dark shades which he from time to time throws on to his canvas, it is well to remember that the likeness is not that painted of him by Kneller, *en grande tenue*, in flowing periwig and lace collar, sitting in state as Secretary to the Admiralty, Captain R.N., Justice of the Peace, and Member of Parliament, as he appeared to others' eyes; but only that of Samuel Pepys, sitting bare-headed, in his robe-de-chambre and easy-chair, by his own fire-side, seen only by his wife and maid-servants; or, rather, that yet more private exhibition of the interior of his heart seen only by himself and that Power "unto Whom all hearts be open, all desires known, and from Whom no secrets are hid."

The extreme rarity of well-authenticated examples of the parasitism of the mistletoe on the oak has induced Dr. Bull, of Hereford, to collect the known instances, which he finds to be eight in number, viz., three in Herefordshire, one each in Gloucestershire, Monmouthshire, Devonshire, Hants, and Surrey. In the most recently-discovered instance, in the Forest of Deerfold in Herefordshire, the mistletoe was found on an oak of the variety *sessiliflora*, some fifty or sixty years old; it is a female plant, growing high up on the main stem, and forming a large spreading branch with a diameter of three-and-a-half feet, and springing from the oak in a single stem nearly four inches in circumference. The mistletoe also grows on a thorn close by, and

has probably sprung from a seed dropped by a bird from above.

A SOLUTION of tannin has been used in the treatment of cotton fabrics, as are hides in the manufacture of leather, and according to *Cosmos*, the cotton thereby acquires greater strength, and resists moisture and disintegrating effects better. No attempt is made to explain the chemical reaction which produces this important change, but it is believed that the change cannot be great, since it has escaped the notice of practical tanners.

From Blackwood's Magazine.
MILLY'S FIRST LOVE.

WHEN Milly Hope was seventeen, being a dear, foolish little girl, she naturally thought that it was time to fall in love. Accordingly she worshipped Mr. Matthew Warburton. She had no young lady friend with whom to gossip and giggle, and her innocent passion grew in pure and sacred silence. A girl's first love is never so truly a poem as when it is a song without words; and such was Milly's for Mr. Warburton.

As to her choice I neither blame nor defend it, because it appears to me that she had none. Of course I do not mean that there was not another man in Drayford. There was Arthur Mannering, the Rector's son, a heavy, unwholesome-looking youth, whose University career had been cut disreputably short, and who was at home simply because his relations "didn't know where on earth to send him," as they candidly avowed. Little Milly could hardly fall in love with Mr. Arthur Mannering. There was Dr. Ford, but he was fifty-three and wore a chestnut wig. There was his assistant, a meek, little, pink-faced man, but he was engaged to a young lady in Birmingham. The curate was married, and so were both the lawyers. So was one of the three bank clerks, another was a mere boy, and a third was inconceivably ugly. (Milly was not acquainted with this trio: I mention them only to make my list more complete.) Therefore I maintain that she had no choice, and is not to be either commended or condemned for her worship of Mr. Matthew Warburton.

He was decidedly the leading man of the place. He was the second partner in the Drayford Bank; and Mr. Maitland, the senior, lived seven miles away at Langton Grove, and was a comparative stranger to the townspeople.

Mr. Warburton was a man of nine-and-thirty. Twelve or fourteen years before, his pretensions to good looks had been universally acknowledged, and they were very considerable at the time of which I write. Unfortunately he had grown somewhat stout, and his complexion was not as delicately pink and white as in old days, the former tint a little predominating. (Do not for one moment imagine him with a red face — the words I have used are the very utmost that could be said. The face was not coarse, though something in it somehow suggested the idea of possible coarseness.) He was a big and decidedly handsome man; whose hair, eyebrows, mustache, and whiskers were thick, strong,

and black; whose aspect was frank, easy, and good-tempered (though a keen observer might detect the under-current of violence and obstinacy); who swaggered in his walk and talk, and doubtless in his thoughts; who was vain of his good looks, of his undoubted ability as a man of business, and of his position at Drayford; and who rolled out his boastful but good-natured talk in a cheery bass voice. Not much that was heroic about him, and yet I think not at all an unlikely hero for a child of seventeen, whose experience of men was so remarkably restricted.

There was not a great deal of society in Drayford, and what there was was considerably flavoured with tea — a beverage and a style of entertainment which, it might be surmised, would find little favour in the eyes of a man like Mr. Warburton. But such was not the case. He was too practical a man to be more than partially blinded by his vanity. It was absolutely necessary to his happiness that he should be courted and caressed. He was morbidly aware that he was not as young as he had been. But among those dowagers, spinsters, old bachelors, and prosy married folks, he felt himself the very incarnation of youth, health, activity, and good looks. He had horrible misgivings that in a livelier and more brilliant circle he might meet with competitors who would rob him of his sovereignty, label him as middle-aged, make fun of him behind his back, and hand him over to the dowagers as a confirmed old bachelor. Although his fears were a little exaggerated there was considerable foundation for them, and the fact that they were entertained by him explains his contentment with the insipid calm of Drayford society. At least he was its leader; and a very gracious and condescending autocrat he made.

If Mr. Matthew Warburton may be likened to an amiable and gentle lion, roaring loudly but harmlessly in Drayford drawing-rooms, then might Milly Hope's aunt, Mrs. Rivers, be described as 1st jackal, helping the stately animal to the banquets of which he was pleased to partake. I mean no disrespect to the lady in question. Second in Drayford society to Mr. Warburton alone, her tea-parties outshone all other tea-parties in splendour, and she occasionally rose to the magnificence of a dinner. It had come to be an understood thing that Mr. Warburton should look in every Tuesday evening, when Mrs. Rivers always contrived to get up a rubber. In fact the Drayford lion was very much at home in that house, and came and went pretty much as he pleased. He liked the pretty, spacious drawing-room;

he liked Mrs. Rivers, a cheery handsome widow of fifty-five; he liked the universal attention he received, the talk, the music.

And little Milly Hope? I am afraid for a long while Mr. Warburton never thought of her. Of course he was perfectly aware that there was an insignificant little girl, whom he called "Miss Milly" if he had to speak to her; to whom he nodded familiarly if he met her in the street (sending a thrill of pleasure through the bounding little heart); with whom he shook hands absently, as a matter of course, on entering and leaving the room (Milly would not have omitted that ceremony on any account): and that was all. No; if he came to Mrs. Rivers's parties for any young lady he came for Bella Mannering.

Bella was the Rector's daughter, tall, slight, with a keen, bold, handsome face. She was four-and-thirty, and for the last eight years had been laying snares for Mr. Matthew Warburton. Her great eyes were as bright and fearless as ever, but her face was a little worn. Kind Drayford critics remarked that though her cheeks were the least thought sunken, she always had the most becoming colour. Hers was a striking face, especially by candle-light, with her big brilliant eyes, her arched brows, her blooming cheeks, and her vividly scarlet lips. She could not fairly complain of Mr. Warburton, though the flirtation had lasted so long, and as yet had come to nothing. She had courted his attentions, and he had graciously responded—that was all.

Still it was an understood thing that Miss Mannering amused and pleased the Drayford despot, and liked the office. Also, it was an established fact that no one knew exactly how to turn over the leaves of Miss Mannering's music except Mr. Warburton; and her powerful contralto voice never rang out so triumphantly as when he was leaning over her, and looking at her with eyes which, if not quite as big or brilliant, were even more fearless than her own.

Bella Mannering believed that the hour of her triumph approached. She had never had a rival, and it seemed to her, from many slight signs, that the fortress she had so patiently besieged would surrender at last. She was not a bad girl. She did really care for Matthew Warburton. And she was grateful—she would have gone through fire and water for Mrs. Rivers, who had given her so many opportunities of meeting him.

It was not a Tuesday evening with its unvarying accompaniment of whist, but a larger and more general gathering. Mr. Warburton, Dr. Ford, the curate and his

wife, and Miss Mannering, had dined there, and a few more had made their appearance in the evening. Bella's place at dinner had been next the banker, and his attentions had never been so marked. Now that the three gentlemen had left Mrs. Rivers's excellent wine, and came steering their way through the sprinkling of ladies, it was very evident where Mr. Warburton intended to cast anchor. Bella carelessly swept aside her trailing skirt and revealed a low and hitherto partially hidden easy-chair. Into this he subsided with a broad contented smile, and resumed the talk they had so lately dropped.

Bella thought the time had come for a decisive stroke. Having mentally laid down the general rule that too complete submission courted contempt and defeated its own end, she proceeded to apply it to her own case. But such an application required the most delicate skill.

Miss Mannering commenced by being capricious. Assuming an air of cool independence, she was haughtily uncertain whether she would or would not sing when her admirer asked her. He was undoubtedly surprised, and for a moment hesitated what to do. Bella would have been content with the slightest homage on his part, as a mere token of some power on hers; but she had mistaken him. She knew he was not deficient in common-sense, and she imagined that his common-sense must in a measure overrule and pierce through his vanity. In reality it only limited it. It taught him that out of Drayford he might be of small account. But among Drayford people he felt himself pre-eminent. Utter submission would have been Bella's safest weapon. She would never have been in such danger of his contempt as she was, thus defying him. He would have seen in her servility only a proof of superior sense.

His indecision was so momentary that Bella did not even perceive it. His quick eyes roving round the room were attracted to little Milly, sitting lonely on a distant sofa. Had she been downright plain he would have used her to serve his purpose, but he was very well satisfied that his self-banishment from Bella's society, though probably wearisome, should not be so disagreeable as that. And thus it was that little Milly was destined to teach Miss Mannering how unwise it was to trifle with the great Mr. Warburton.

So, politely acquiescing in Bella's refusal to sing (no sooner uttered than repented), he rose slowly from the easy-chair and strolled across to the little exile on the sofa. Milly's heart leapt up to meet him, and she

could hardly believe her eyes. He was angry with Miss Mannering, of course. And indeed it seemed to Milly, though Bella *was* so very superior and beautiful, and as nearly worthy of Mr. Warburton as any one could be, she had not behaved nicely that evening. But, the little girl reflected with a sigh, Mr. Warburton's coming and sitting down, as if he meant to talk, was no good — he would soon be tired of *her*, she was so silly; and then he would go back to Bella, and it would be worse than if he had never come, for he would always think what a stupid little idiot Milly Hope was.

Still she could not help being pleased in spite of her gloomy forebodings, and her little heart throbbed tumultuously, and the wild-rose colour came into her cheeks. There was a light in her soft grey eyes, and when she looked straight up into Mr. Warburton's face they were frightened, rejoicing, and beseeching all at once. He must have understood them had he been a duller man. He was flattered, and it was a new kind of flattery, and he said to himself, "By Jove, the child is pretty after all!"

"The child" *was* pretty — singularly so when she grew excited and lost her shrinking awkward look. She had put on a dainty white-and-green dress, and had a green ribbon in her golden hair. The colour, unlike poor Bella's unchanging bloom, came and went in her cheeks at almost every word, and she had a pretty unconscious trick of drooping her long lashes till a remark was made, and then suddenly raising her eyes, brimming with light, to the speaker's face. Mr. Warburton felt that his exile would not be intolerable.

It was necessary to get up an animated conversation lest any one should imagine him bored, so he set about his task. With Bella he tried to be brilliant, with little Milly he only wished to be gentle. And he succeeded admirably. He subdued his strong voice to its softest tones, he smiled his most encouraging smile, he listened kindly to every word she uttered, and she was soon chattering happily. But every now and then she flashed a quick shy glance of suspicion and inquiry into Mr. Warburton's face, like some slender little woodland creature, wild and timid, and newly caught. But she found nothing but what tended to reassure her, and that from no deep-laid scheme on her companion's part, but simply because he really was good-natured and genial if he were suffered to have his own way. Milly was likely to meet with pleasant looks when she was feeding his vanity so pleasantly, and offering the incense of

her admiration with so innocent a delight in her office.

Bella watched them with eyes at once sombre and brilliant. She was annoyed and disconcerted, slightly apprehensive, but not seriously so. She understood Mr. Warburton's tactics, and though in her inmost heart she resented the lesson, she fully intended to profit by it. For that evening she must endure in silence; it was impossible to pursue her prey to his new retreat. Bella, after the first shock of astonishment and disgust, remembered herself, and directed her glances elsewhere. Yet the discomfited huntress knew perfectly well how the lordly animal, who had shaken himself at any rate partially free from her toils, was ostentatiously displaying his liberty, as, superb and sleek, he sunned himself in Milly's tremulous but triumphant glances.

For that evening she must endure, but when next they met she would effect a prompt reconciliation, indulge in no more dangerous experiments, weave her bonds anew around Matthew, and triumph by submission.

She looked for some possible relenting in his face when he bade her good-night, though she hardly expected her punishment to be so quickly over. And it was not. If he had not met her glance, Bella would have taken it as a slightly favourable sign. But even that poor consolation was denied her. Warburton looked straight into the face which she tried to keep perfectly calm, with eyes at once keen and indifferent. It was their first passage of arms, and Bella owned to herself that her antagonist was too strong for her, armed with his cool assurance and cased in his invulnerable vanity. She bit her lip as she saw him bid Milly good-night with a gracious look and meaning smile, and what she was certain was a lingering pressure of the shyly responsive little hand.

It was long before either of the rivals slept that night. Bella was kept awake by vexation at her own folly, sudden stabs of jealousy and a cold terror lurking in her heart which she dared not clothe in words, and tried vainly to ignore. But Milly lay on her little white-bed in a tumult of happiness, with throbbing pulses and bounding heart, pressing her soft hot cheek on the cool pillow, and, fretted by her tangled hair, pushing its great golden waves from her flushed face. With eager eyes she looked out, not into the dim night which surrounded her, but into a future which was a very fountain of sunlight. Nothing but the knowledge that only a very slight partition divided her from the head of Mrs. Rivers's

bed, kept her from breaking out in sweet, low, inarticulate singing like the warbling of a happy bird. "So kind, and oh how handsome! So handsome, and oh how kind!" — was the burden of her thoughts as she fell asleep, and she took up the glad refrain when the morning sunlight bathed her in its earliest radiance, as if there had never been a pause in it at all. The child was as bewildered in her happiness as if to one who had had day-dreams of diamonds were suddenly flung the Koh-i-Noor.

Milly and Bella alike looked eagerly forward to their next meeting with Mr. Warburton. Milly, in her happy hopefulness, was inclined to make it a final test. If he went back to his old allegiance, she would understand — how the little heart fluttered and sank at the mere idea! — that he had never really wavered in it. But if he came to her again — oh that sanguine, joyful "if!" — she would believe that he had cast the old bonds aside for ever. Naturally, therefore, she anticipated the great moment with a quivering intensity of expectation.

Bella, though anxious and excited, was more moderate alike in hope and fear. She did not undervalue the importance of the meeting, but she felt that it would not be absolutely decisive. If Matthew Warburton came back to her, she was fully determined that he should leave her side no more. She did not expect him to yield; all she wanted now was that he should give her an opportunity of yielding. If he went to Milly again without affording her the slightest chance of holding out the olive-branch, she would look upon the matter as serious, upon the gulf between them as dangerously wide; but she would not even then despair. She knew Matthew Warburton well enough to understand that, once offended, he would like to see the offender fairly in the dust at his feet before he granted his pardon. Bella would rather have liked the same thing herself. Could a sudden stroke of fortune have made her rich and independent, she would not have been thoroughly happy without Matthew Warburton. But she would dearly have liked to humble him first.

Tuesday evening came. Bella was superb in a flowing black silk — gleams of scarlet at her throat, and in her jet black hair. She swept the room, her queenly head thrown back, her great eyes flashing and dilated, her lips a little compressed. "Why, Bella, my dear, how magnificent you look to-night!" cried placid Mrs. Rivers. So thinks little Milly. Her fancies in the matter of dress are kept within proper bounds by her aunt, but she, too, has done

her best to look well, wearing a dress of pale blue, which, lacking the silken lustre of Miss Manning's, yet falls in softer and more graceful folds.

"Mr. Warburton."

The Drayford hero advances, with his usual air of superb self-confidence, shakes hands with Mrs. Rivers, shakes hands with Bella and the others, and turns to Milly with a smile and a glance which seem to link this meeting with the parting of two or three days before.

Bella turns away with a heart brimming with bitterness. Mr. Warburton begins to talk to his hostess; but, from time to time, he appeals by word or look to happy Milly. Tea coming in makes matters rather worse. Milly is always her aunt's deputy at the urn, and Mr. Warburton proves himself the most devoted of squires. Through the whole of that weary tea-time, Bella, putting a strong constraint upon herself, sat in apparently smiling indifference, and keenly studied her faithless admirer all the time. Was he acting a part, or was he — was it possible he could be? — in earnest in his new devotion? She could glean nothing from his face. And indeed it was not likely. Had she arrived at any definite certainty she would have been more advanced than Mr. Warburton himself.

He was honestly not quite sure what he intended or wanted. He was fascinated with the innocent frankness of his new love. He was strongly inclined to throw Miss Manning over altogether, and — well, why shouldn't he marry little Milly? He might do worse. He did not mean to live and die a bachelor, and it was time to think of bringing a wife home to the pompous red-brick house in the High Street. Why not little Milly? Only, you see, his long flirtation with Milly's rival had made a certain impression upon him. Well, there was no hurry. And, meanwhile, there was one thing he saw plainly, that it could do no harm, and would certainly be pleasant to him, if, with Miss Hope's assistance, he gave Miss Manning another lesson in manners.

I think I hear a chorus of young ladies' voices denouncing him as a brute.

A brute? No doubt he was, as the term is often used. Yet, was it altogether Mr. Warburton's fault? For fifteen years he had been courted and worshipped in Drayford, and had he had a humble opinion of himself he must have had it all to himself. Had not Bella done much to foster the inordinate vanity and serene contempt which so humiliated her now?

He had received the worst possible train-

ing. It is true that no training, as far as one can see, could have made him an exalted specimen of humanity. His tastes were not refined—his feelings were not delicate. Not only had he no spark of the old chivalrous spirit, but I cannot conceive the power which could have him even understand its nature or believe that any man living could really be animated by it. Men were humbugs when they wrote or spoke in any different fashion to what he felt in his honesty. He had no reverence for women, nor, for that matter, much respect.

Yet, after a fashion, he was honourable. What he considered the most important thing on the face of the earth was Matthew Warburton's word. I cannot imagine the temptation which would have induced him to swerve from that. Had he pledged it to Bella Mantering, little Milly, though she had been ten times as innocently attractive, could not have made him unfaithful for one moment.

Unluckily it was only the absolute word, written or spoken, that he revered, and he did not in this case consider himself anything but a free man. Even Bella felt that she could hardly reproach him. A more delicate sense of honour might have felt something of a bond, but Mr. Matthew Warburton arose and shook himself like Samson, and like Samson found himself unfettered. So he pondered, tending ever towards one decision.

Bella waited for her chance till after tea. She was occasionally a whist-player—Milly never. She determined to be one of the quartette that night, and fortune favoured her, for she was Matthew Warburton's partner. But it was no use. Her glances, which of old could bring him from the other side of the room, now seemed to fall short even when darted across the card-table. She played well—he took it as a matter of course. She trumped his best card and he glanced indifferently at it, and then suffered his roving eyes to wander where Milly sat near the window, talking to the curate's wife, who hooked away at her crochet with a pleased smile on her faded face.

Mr. Warburton, bringing his eyes back rather suddenly, caught something of the stormy blackness of Bella's watchful glance. He bent his face a little over the cards he was sorting, and hid a half-smile. "Amiable—very," he said to himself; "a nice sort of look to meet a man when he comes home in the evening." And he tossed down his first card, and flashed one quick glance to the group by the window again.

He joined it when the card-playing was over. Bella lingered by the table, absently turning up card after card, as if in some mysterious way she hoped to find her fortune written there. She felt helpless and rather hopeless. If Mr. Warburton's glances had sought hers even in malicious triumph, she would have welcomed them as indications that at any rate he thought of her. But they never did. He was either acting or feeling the most complete indifference.

Bella reached out her hand to one card which lay a little apart from the rest, face downwards on the green cloth. She turned it up, and it was the Queen of Hearts. Was it an omen or a mockery? Bella looked fiercely at the painted simpering face, and the hand primly holding the invariable flower. "You are better off than I am," she thought. "At any rate, you've got the knave and king to play off against each other; I've only one, and I declare I don't know which he is; though I rather think—knave!"

She flung the fortunate queen down, and glancing after her saw that she lay among those already turned up, with the king at her feet. "Come," said Bella, bitterly, "there's Milly's fortune at any rate."

Miss Mantering had naturally had enough of the cards since she read them in this gloomy fashion. She went across to Mrs. Rivers, and joined in the conversation that lady was having with the curate.

Another evening of triumph for Milly. But when it was over, the little maiden was too tired to lie awake and think of her hero. She was rather ashamed of herself that her sleep was not even broken by any dreams of him.

Neither was the morrow without its share of happiness. Milly, going out for a walk, met Mr. Warburton near the Rectory. He sauntered some little distance by her side, and then regretted when he looked at his watch that he could not go any further. Milly regretted it too, as he parted from her with an unnecessarily lingering pressure of the hand. Nevertheless she went the rest of the way, feeling as if her heart and feet were so light that the one was in Paradise and the others scarcely touched the ground. Bella, gloomily looking from the Rectory window, thought the place of meeting had been purposely selected to torture her. She watched them in bitterness of heart. But I think her feelings would have been tenfold more bitter could she have known what was indeed the truth, that neither Matthew nor Milly had so much as remembered the fact of her existence.

Still there was to be one brief gleam of apparent sunshine for poor Bella. Sunday had come in the interval, bringing a fresh cup of humiliation for her reluctant lips. Mrs. Rivers and Milly were both at church in the morning, and Mr. Warburton was not. But in the afternoon Milly was alone in their pew, and Mr. Warburton was in his; and service being over, he joined her in the porch, and in the sight of all the congregation walked home with her, carrying her prayer-book.

Bella had taken the organist's duty during his temporary absence; and as she stood rolling up her music and putting on her gloves, a meek little Drayford spinster came, and, after shaking hands with her and inquiring after her mamma (Mrs. Mannering being an invalid), proceeded to inquire if there wasn't something between Mr. Warburton and Milly Hope.

"Mamma is much as usual, thank you," said Bella, with a grandly lowering face. "As to Mr. Warburton and Milly, I fear I cannot give you any information. It's not my business, and I am not their confidante. And I hardly think, Miss Wilkinson, that church is exactly the place —"

"Oh, my dear, no! My dear, I am very sorry—it was exceedingly thoughtless of me. I'm sure I beg your pardon."

"Not at all," said Bella, with undiminished stateliness. But the little spinster went away in a very unhappy frame of mind, and ready to burst out crying. To have been rebuked by the Rector's daughter for talking about such things *there*—it was dreadful—it was like incurring the censure of the Church! To think that Bella should have taken it *so*! But when poor little Miss Wilkinson came somewhat to herself, she drew her inferences pretty correctly from the fact that Bella had taken it *so*; and it was speedily the common talk of Drayford how "Mr. Warburton had jilted Bella Mannering, and she was so mad about it she was ready to poison him and Milly Hope together."

Bella solemnly determined she would not go to Mrs. Rivers's house again; but when the time came she could not stay away. Accordingly she went. Mr. Warburton came late, and whether anything of the rumours had reached him, and he wished to stop the flood of Drayford gossip a little, or whether Milly looked rather too triumphantly confident that he was coming to her, and he who had emancipated himself from Miss Mannering's tyranny did not choose to be paraded as a captive by "that child," as he had called her, certain it is that, his greetings over, he resumed his old place by

Bella's side. Milly saw it with a sudden incredulous despair. He had not meant anything, then—he had liked Bella best all the time; she had been foolish, and he would laugh at her if he knew; and she hated him,—no, she loved him, and her dream was over, and her heart would break! She did not take her lesson even with Bella's fortitude. The very utmost she could do was to refrain from bursting into a flood of childish tears.

Bella was too doubtful to dare to be triumphant. She distrusted this tardy return, which had no warmth of reconciliation in it. She did her best, however, to welcome the truant. She tried to talk as in old times (only a fortnight before, but it seemed ages), still it was with a heart which sank lower and lower every minute. Formerly she had felt that he liked to talk to her, that he was amused and pleased: now, say what she would, she instinctively felt that she had not awakened his interest. She fought with the valour of a forlorn-hope, but with the conviction that it was useless. She was not surprised when he answered absently, and his eyes went with a sort of pitying amusement to drooping little Milly.

It was very hard, Bella thought. She had loved Matthew so long, so very long. It was her last hope; and Milly had her life before her. And knowing nothing of the child's foolish secret worship, Miss Mannering supposed she had never thought of Mr. Warburton till the evening he went across and sat by her side on the sofa. "Her vanity is flattered; she does not really love him," she thought; "the game is not utterly lost perhaps even now."

But I think she would have thrown up her cards could she have looked into Mr. Warburton's heart, and understood the meaning of his serenely gracious smile. He had not known what he felt or wished at first. He had almost fancied that he cared for Bella, when really it was only that he was used to her. Her doom was sealed, and his heart pierced to the core, when Milly looked up into his face with her glad beseeching smile. He was dull in matters of feeling, and had not understood then, but he knew what he wanted clearly enough now; and meant to have it without more delay:

"Well, we may as well have our rubber," said Mrs. Rivers, "Dr. Ford?" The Doctor bowed assent. "And," she glanced irresolutely at Bella and Miss Wilkinson, "Bella, will you play?"

"I shall be very happy." (Miss Wilkinson was rather sorry. She liked playing whist with Doctor Ford.)

"And Mr. Warburton — that will be —"

"Thank you, no," said Matthew. "I've been busy all day. I'm rather tired, and," he glanced at his watch, "I fear I must go early."

Bella was thunderstruck. The idea of such a calamity had never entered her head. However, there was no help for it. Miss Wilkinson took the vacant place readily enough. Bella could have cried with vexation and spite, but she controlled herself with a violent effort, and the game began.

Milly had heard Mr. Warburton's refusal to play, and the woe-begone little face had brightened. But it clouded again when he lingered watching the first hand. Perhaps he would stay there looking at them a little while and then go. She was in an agony of hope and fear.

Card after card fell — would he *never* come away? Yes! yes! yes! he was coming, lounging across the room in his own superb style. The low chair by Milly's side creaked as he dropped into it, and she was in Paradise once more.

"You look very melancholy to-night," said the gentleman.

"No," and the little lady shook her head. "No — indeed."

Mr. Warburton only smiled.

"Shall you have to go away very early?" she asked. It was the subject uppermost in her mind, and she could think of nothing else to say.

"Not very; unless I go for a moonlight walk."

"Oh — are you going?"

"Not that I know of."

Another "Oh!" and "What made you talk about it, then?"

"Because it's just the night for it if any one felt inclined."

"It's moonlight, then?" said Milly, looking across at the windows.

Mr. Warburton laughed. "Why, of course it's moonlight — a splendid moon. I say," lowering his voice, "what do you say, Milly — will you come out on the balcony and see, eh?"

Bella, wearily whist-playing, saw them cross the room and disappear behind the curtain. She would have cheerfully given ten years of her life to have been able to see beyond it. And if she had paid the price, and followed them, I think she would have cried out in utter bitterness of soul, "Take all the rest, and let me lie down at once!"

For the safe shelter scarcely reached, she would have seen a strong arm round a slender waist, a slight form which, swaying,

yielded as it was drawn, and a proud head bent to whisper what, for manner, might have been a royal declaration of love. Milly answered it neither by word nor look, only drew a little closer to her lover's side. But when, in answer to his pleadings, the golden-haired head was raised a little, the delicate flower-like lips and cheeks were pressed to the handsome black-whiskered face which was stooping over her.

It soon went back, leaning on Mr. Warburton's elaborate shirt-front as if that were its natural resting-place. And then Milly whispered . . . No; I won't tell you what she said. It's no business of yours. And if she talked nonsense Mr. Warburton set her the example, and he was old enough to know better. So if you like to blame him you may, though I shall not join even in that, for I think Mr. Matthew Warburton never did a wiser thing in his life than he did in that five minutes on the balcony.

(By the way, there was something I wanted to say about that moon, for I like to be accurate. Milly thought it was "lovely," and Mr. Warburton, as we know, described it as "splendid." But I do not myself think it was very remarkable; in fact I should have said not full, and certainly a little misty. We have all seen the moon shedding such a flood of keen radiance that the landscape seems to wear a veil of transparent snow. But on this occasion there was nothing of the kind. I really think the utmost that could be said for it would be that it was like Mr. Birdofredum Sawin's star, "a middlin' shiny one." — But then I did not view it from that balcony.)

Mrs. Rivers's gilt clock ticked steadily, totally ignoring the fact that outside the window the minutes, marked by fond whippers and beating hearts, were going like lightning; while within, measured by the monotonous fall of the cards on the cloth, they dragged wearily on.

Matthew was stroking Milly's rippling hair, and with all the soul he possessed looking into her eyes. She drew her face a little away, and laid her soft cheek against his hand in a mute caress.

"I must go now, Milly," he said.

And Milly said, "Please — please." Can you wonder that after so eloquent and convincing a speech Mr. Warburton should have remained at least ten minutes longer?

But at last he did go. Parting from her with a long embrace, kissing the soft lips and the tremulous eyelids and the little hands, he withdrew the curtain for a moment, stepped into the drawing-room, and walked coolly up to the card-players.

"Good-night, Mrs. Rivers—I'm off," he said. She took her eyes from the king of trumps for a moment, and returned his "Good-night:—" "Good-night, Ford—you won't walk home with me, I suppose?"

"Thank you, no," said the gaunt serious doctor; "I must finish my game."

"Yours takes some time to play," said Matthew; "Good-night, Miss Wilkinson." Then he looked over Bella's hand: "Well, Miss Mannering, and are *you* playing your cards pretty successfully?"

Seeing that Mr. Matthew Warburton knew perfectly well that for his sake, and for his only, Bella had joined the game, and while she was thus cruelly trapped, he had been making love to her rival a few yards away, it was a mean and ungenerous speech. The man who loved Milly, and whom Milly loved, *ought* to have been incapable of finding pleasure in pricking sensitive Bella with a taunting little jest. But he was not. I am more angry with him for that, I think, than for anything else.

"I don't know," the girl replied, with a flash in her lowering eyes; "some games are only played for amusement, and one does not trouble one's self about the end."

"Oh, is that it?" said Matthew; "well, so much the better if you are losing—it sounds rather like a loser's speech;" and he held out his hand, which she just touched with the tips of her reluctant fingers—and so he departed.

Little Milly watched her opportunity, stole across from the window, and went silently to her own room. When they had finished their game, the whist-players heard that Miss Hope was tired, and had gone to bed.

The truth was, she did not want to talk that night. She even made up her mind to pretend to be sound asleep when her aunt should come in to kiss her. The dreadful hypocrite rehearsed a little beforehand, and did it very well—so naturally, indeed, that she had done the real thing long before Mrs. Rivers came in with her carefully-shaded candle.

All this happened in May, and it was now nearly the end of September. Every one in Drayford knew the result of that evening's inspection of the moon. The Mannerings had been ten weeks at Brighton, and were just home again. "Bella looked better for her change," the gossips said. She was statelier than ever, but had a tired look about her eyes, and her temper was a little uncertain,—sometimes very gentle, so that its sad humility seemed out of harmony with her queenly bearing—sometimes fretful and sullen.

Mrs. Rivers was sorry for the disappointed girl, and Bella seemed to bear no malice, but came and went as of old. To Milly she was less variable than to others, almost always kind, but with a certain coldness, keeping her, and, still more, Matthew, at arm's-length.

Mrs. Rivers might be sorry for Bella, but she could not help feeling glad that her niece was provided for. She could leave the child something when she died, but the larger part of her income would revert to her husband's family, and Milly was her sister's daughter. So, apart from her liking for Mr. Warburton, she was naturally pleased that her little girl should have secured the best match in Drayford.

Nevertheless she had at first objected to a positive engagement. She hoped Milly knew her own mind, and would not change; still she had a feeling that the helpless motherless girl ought to have a certain amount of freedom secured to her. "She is too young," urged Mrs. Rivers to the imperious and impatient wooer—"only seventeen last February—she is too young to be married—too young to pledge herself finally. You must give her time."

Mr. Warburton did not see that, and tried to put Mrs. Rivers down with a strong hand. But the placid lady proved surprisingly obstinate. Then he changed his tactics, and made concessions with an immense amount of fuss and parade. Mrs. Rivers accepted them gratefully, and discovered, too late, that he had hardly yielded anything at all.

Milly's birthday was the 19th. Mr. Warburton suggested that there could be no possible objection to their marriage then. "Lent," said Mrs. Rivers. Matthew gulped down a strong word about Lent. "Well, then," he said, "as soon after Easter as could be managed." After a prolonged debate, Mrs. Rivers yielded. If, when the New Year came, Milly had not changed her mind, it might be considered a settled thing. "And if she does, I'm to grin, and bear it, eh?" said Mr. Warburton. "Yes," said Mrs. Rivers, looking up with a smile at the jolly handsome face; "you must grin, and bear it." Matthew said it was very hard.

Milly thought it was extremely absurd when she was told of it, and was rather indignant on Matthew's account. "As it I could ever change," she had whispered—"as if I could ever change!"

And Mr. Warburton tossed his head slightly back, with a broad smile of pleasure at her words, and amusement at Mrs. Rivers's folly. "My dear girl, do you

suppose I was afraid?" "I never will," she persisted; "Matthew, I never will!" And that was how they settled the question of Milly's freedom.

Mrs. Rivers had gathered up all her energy for one protest, and that being made, she drifted on in her usually placid passive way. As she sincerely wished for the match, and as she thought her niece really did seem to be sure of herself, she only faintly remonstrated when Mr. Warburton altogether ignored their covenant, and behaved on every occasion as if it were already a settled and positive thing. Indeed, after a few weeks the original treaty was almost totally forgotten. Bella perhaps remembered it. And Milly used merrily to threaten her big lover now and then, that if he wasn't very good she would change her mind before New Year's Day. At which capital joke they both invariably laughed.

As I have said, the summer was ebbing fast. It was the end of September, and stray leaves began to flicker softly from the trees, the freshness of all verdure was gone, and the fields were grey stubble which had been golden corn. When next the summer came round, Milly thought, as she looked out at the warm, rich, yet mournful autumn landscape — when next the leaves came out and the flowers bloomed, she would be married. Before the little copses were blue with hyacinths — but she would have time to go and pick some primroses as Milly Hope, and then — did married ladies ever go out and pick primroses, she wondered? She rather thought not. And of course she would go out for walks with Matthew then, and she did not think he ever picked wild flowers. Well, she would have a last scramble in the Drayford woods, get a last nosegay from the hedgerows, and from the height of her approaching dignity and happiness look back with that mixture of scorn and pity and yearning to the simple childhood which had passed away for ever. Milly thought of it as if it were some little old-fashioned frock or ornament, once dearly prized, now altogether outgrown, absurd, impossible to put on, yet regarded a little sadly and tenderly by the young fashionably-dressed lady, who felt with a curious kind of pain that, though the world was before her and a thousand changes might come, there was one that could never be. Never could she change again into the simple artless little creature who knew no passion either of joy or sorrow, who loved her aunt and her nursemaid, and later, her governess, and liked to have bread and treacle for her tea. No, Milly reflected, half smiling, half sighing, all that was over for ever.

She had been very happy through the past summer — passionately, triumphantly, excitedly happy. Mr. Warburton's future wife was an important personage in Drayford. Milly had been caressed and made much of where of old she had been ignored. And Matthew's good temper had been unvarying. Never had she seen the faintest flash of displeasure in his eyes except once, when he took it into his obstinate head that some one had slighted her. Then indeed he had raged, and Milly had had to soothe him with many innocent little artifices. But a woman delights in a lion-like fierceness, if to her the lion is a lamb.

But — I verily believe that word "but" was made to come in at the end of descriptions of felicity — there was one tiny flaw in Milly's great happiness. She had not the slightest doubt that Mr. Matthew Warburton was the first and highest of men. Indeed she considered him an absolutely perfect man. But she wished men in general could be altered in one or two little things.

Matthew Warburton since that moonlight night petted her, fondled her, loaded her with presents, but did not see that he was bound to be *polite* to her. He had no natural courtesy; his politeness was donned for company; it was irksome and chilling to him, so that of course it was flung aside when he was with his future wife. Milly could not have defined what it was pained her, but something jarred upon her finer feelings. It was a pleasure to wait on her lord and master in little ways, and yet she was angry with herself because of a certain irritation which she felt in so waiting. Mr. Warburton took such attentions as a matter of course, and saved his politeness for other young ladies, while he gave his love to Milly.

After all, do not we see a good many husbands who do exactly the same? Unreasonable little Milly, to want both love and courtesy.

I remember hearing once how the principle was thoroughly carried out at a young mechanic's wedding. The bride came with one bridesmaid, both decked out in what finery they could manage. The ceremony being over, and the names duly signed in the vestry, the bridegroom, with the greatest politeness, offered his arm, not to the bride, but to the bridesmaid, and conducted her out of church. Of course he preferred his wife, who came meekly at the couple's heels, but then she *was* his wife, and the other was a strange young lady, and as such entitled to the benefit of his company manners.

Matthew Warburton was guided by the

same feeling, though it was hardly probable he would follow it out so logically. Milly supposed it was natural to all men, and that Dr. Ford's prim little pink-faced assistant was free and easy with the young lady at Birmingham.

The last Tuesday in that September Bella Mannering made her appearance in Mrs. Rivers's drawing-room. And following Bella Mannering came a young man.

A grave, quiet young man, who had a pale face and a thoughtful manner, and who stood silently by Miss Mannering while she explained that they had met Mr. Eversley at Brighton, and he was staying with them for a few days, and they were sure Mrs. Rivers wouldn't mind. . . . And Mrs. Rivers hastened to assure her that not only did she not mind, but that she was charmed to make Mr. Eversley's acquaintance, and the pair shook hands. A general introduction followed, and everybody looked curiously at Mr. Eversley, and Mr. Eversley looked at every one a little absently. He was not shy, only very quiet. He talked readily enough, in a voice which, though very pleasant, was extremely low. After a while he found himself near Milly as she sat at the tea-table. Mr. Warburton had not yet arrived, and the little tea-maker was rather solitary. Perhaps even dull Drayford folks had discovered that young ladies who are waiting for their lovers are not the liveliest of company. It would have been unreasonable to expect a sparkling flow of small talk from Hero, for instance, when with straining eyes she looked out across the waves.

But Mr. Eversley was not aware of any tie between Milly and Mr. Warburton, nor indeed of that gentleman's existence; so, bravely approaching her where she sat intrenched behind the big tray, he offered his services if he could be of any use.

Six months earlier Milly would have been confused and bewildered, but the engaged young lady was rather more self-possessed. "Oh, thank you," she said, "you might give me those cups."

He did. Then he filled up the teapot for her. "Aunt Rivers will not have the tea brought into the room and handed round; she likes to see it made," said Milly.

"Don't you?" said Mr. Eversley, as he tried to see through the steam whether the teapot was full. "I think it is much nicer."

"Only no one does it now," said Milly.

"Which makes us appreciate your kindness the more. Why are you so anxious to be exactly like everybody else?"

Under her directions he fetched and carried several cups for the assembled spinsters

and dowagers. But after a time, the demand for tea and cake and thin bread-and-butter having subsided, he sat down by Milly and began to talk.

Seeing him more closely, she presently made the discovery that Mr. Eversley was by no means so young as she had imagined from her first glance at his beardless face. Probably the candle-light had helped the brief illusion. Now that he was so near her, Milly saw that he was somewhat worn—that there were faint suggestions of hollows in cheek and temple, and "a lot of tiny little wrinkles," as she said to herself, at the corners of the bright gentle eyes. But he had a quantity of soft brown hair, which he wore rather too long to be fashionable, and the smooth silken waves looked very youthful indeed.

Mr. John Eversley had a pleasant though rather a melancholy face. He seemed marked out by nature as a sort of amateur father confessor. You felt a curious impulse to tell him all your secrets when you looked at the soft inquiring eyes, the mouth formed for gentlest speech if speech were needed, if not, for kindly silence, and whose lips seemed incapable of laugh or sneer.

He was the son of a clergyman named Lisle. He had gone out to India as a young man, and had come back after two years, so ill he was hardly expected to live. Wandering to and fro in his aimless, gentle way on the parade at Ventnor, the young fellow had attracted the attention of a solitary old officer who was also wintering there. Colonel Eversley made inquiries about John Lisle; found he had known his uncle in old times; introduced himself to the young man; was fascinated by him, as every one was who knew him; made John move from his lodgings to the house where he had established himself; planned tours in which his new friend was to be his companion; and finally, when the spring-time came, Lisle began to talk about going away, and, since his health was a little re-established, seeking something to do, it appeared that Colonel Eversley could not part with him. "I'm all alone in the world," he said. "I buried my boy seventeen years ago, and he was the last of all. You had better stay with me, John, and take his place. No one has any claim on me. What do you say? Can you put up with a fretful, fidgety old fellow, eh?"

John thought he could. Mr. Lisle, who was anything but a rich man, and who had mourned over his boy's dark prospects, looked upon the wealthy Colonel Eversley as a messenger sent by Providence to rescue John from his perplexities. It was not like

waiting for dead men's shoes, either. Young Lisle stepped at once into the pleasant position of the Colonel's son. The old man took every opportunity of making it clearly understood among his acquaintance that his young friend would inherit every shilling he had to leave — no inconsiderable fortune.

So the two had roamed about in France and Italy. John almost worshipped the grand old Colonel, and felt a son's sorrow when he laid his adopted father in the grave. Perhaps no clause in the will gave him more pleasure than that which bound him to assume the name of Eversley.

He had met the Mannerings at Brighton, and had made friends with the Rector. When they asked him down to Drayford, being an idle man, he came. But he hesitated a little before he accepted the invitation. He wished to please Mr. Mannering, who was evidently anxious he should come. He had never been at Drayford, but he had an unpleasant remembrance of its name.

Before he went to India a situation had been found for his only brother in the Drayford Bank. Owing to some negligence on the part of one of his superiors, the young man, who was terribly in debt, had been sorely tempted and had fallen. Of course he intended to make all right. Equally of course, he could not. His ruin was imminent, nay, inevitable. But a friend to whom he confessed his madness contrived to save him from its darkest consequences. His generous help and strenuous exertions were in a great measure successful. The matter was hushed up, and young Lisle went away. People knew there was something mysterious about his sudden departure; but though there were many rumours there was no certainty, and the talk died out in time.

It was all over when John came home ill. George had gone to Canada, the generous friend had been repaid — only Mr. Lisle knew at what cost, for he buried the secret of his younger son's misdeeds in even more than his accustomed silence. John knew that something had gone very wrong during George's stay at Drayford, but had never chosen to ask for particulars which must be as painful for him to hear as for his father to relate.

It was the remembrance of this old trouble which had made John hesitate about accepting Mr. Mannering's urgent invitation. But he did not hesitate long. "I can do no harm," he reflected; "the whole thing is gone by — *was* gone by before ever the Mannerings went there. Nothing about me can in any way recall my brother to peo-

ple's minds — we are not a bit alike," — his thoughts flashed from his melancholy reflection in the mirror to a bright fair florid face; "and as to names, no one will have the least reason for supposing Mr. John Eversley to be related to Mr. George Lisle. I'll go." And thus it came to pass that he found himself by Milly's tea-table that September evening.

He talked softly and fluently about books and music, and after a time slid into a description of some of his travels; but it was curious to note, whatever the subject, how rarely he said "I," — it was always "a friend of mine," or "the people at such a place." Milly listened, well pleased, but as she listened she looked from time to time at the door. It opened at last and her lover appeared. John stopped in the middle of a sentence to follow the direction of her eager eyes. His own rested on the big handsome man who was replying in a great jovial voice to a buzz of greetings. They lingered on Mr. Warburton's face for a moment, and then were turned away full of a faint but decided antipathy.

Mrs. Rivers, probably doubting whether her niece would ever make her old and new friends properly known to each other, came to the tea-table with the banker, and a formal introduction ensued — Mr. Eversley — Mr. Warburton. The two men bowed and exchanged greetings and glances. Mr. Warburton was loftily indifferent, Mr. Eversley was reserved and chilling.

Milly looked radiantly up into Matthew's face, "You are very late." He smiled and whispered something John did not hear. "Sit down," Miss Hope continued, "and let me pour you out some nice weak tepid tea."

"Thanks," said Mr. Warburton; "I think I won't have any if it's cold."

"Oh, but it isn't really — at least I hope not. I shall give you a cup — you needn't drink it if you don't like it."

"Trust me for that," said he.

So it was duly poured out, and Mr. Warburton, who was leaning lazily back in his chair by Milly's side, had it handed to him, and was particular about the amount of cream, and fanciful as to the exact strength of the tea. Then there arose a discussion on the subject of sugar. Mr. Warburton averred that he had watched the proceedings from the beginning, and she hadn't given him a morsel. The little tea-maker as stanchly asserted, with an astonished "Oh, Matthew!" that she had. "You won't like it if you get too much," she said. "Taste it and see."

"Not a bit," said Mr. Warburton con-

fidently, after going through that ceremony; "not the least taste of it." And then he informed the company in general that Milly was putting him on an allowance of sugar already, and wasn't it a hard case?

"Oh, Matthew! Oh, what nonsense!" cried Milly, but stopped abruptly, for she encountered Mr. John Eversley's brown eyes fixed on her with an expression of cold gentle wonder. The colour rushed painfully to her cheeks, and with a sudden feeling of humiliation she caught the cup out of Matthew Warburton's hand, and tumbled two or three lumps of sugar into it in breathless haste. For about a minute she hated Mr. Eversley.

"Come," said Mr. Warburton, as his cup was restored to him by his flushed unwilling Hebe, almost as hurriedly as it had been snatched away, "let's see what it's like now." He sipped it and looked up with an amused smile: "Well, Milly, when you *do* make concessions it's in a liberal spirit, and no mistake. Thank you, my dear girl," holding out the cup for her to set down, "I've had plenty."

Then she was distressed. She wanted him to have some more, but he would not. Repenting of her haste, she said, in an anxious whisper, "You're not vexed with me, are you, Matthew?" To which he returned a loftily good-humoured smile and shake of the head, and after a minute went across to Mrs. Rivers.

"Who is that fellow?" he asked.

"Why, that's Mr. Eversley."

"Thank you very much; only you told me as much as that when you introduced us."

"Bella Mannering brought him. He is staying at the Rectory. Very well off, I believe. They met him at Brighton."

Warburton looked very knowingly from Bella to John Eversley, and when Mrs. Rivers left him he mused for a moment with a well-pleased smile.

"Hooked some one else, has she? Well better luck to you this time, Miss Bella. I hope you'll land him. I don't particularly admire your taste"—he glanced at the slim, melancholy gentleman by the tea-table—"at least not your *present* taste. Still, that's your look-out, not mine." He had been sorry for Bella, and though he had repeatedly assured himself, and indeed believed, that he was in no wise guilty of any faithlessness towards her, he was sincerely glad to see a prospect of happiness for her in this new direction. "We must make Drayford pleasant for Mr. Eversley, and give the girl as good a chance as we can," Mr. Warburton soliloquized in his

kindness. "The Rectory must be awfully dull. Old Mannering is a prosy old bore, if ever there was one, and Mrs. Mannering's worse, with her continual ailments. And this fellow doesn't look the sort to get on much with young Arthur. No—we must see what we can do, for Bella's sake. Poor Bella!"

Poor Bella, indeed! I verily believe that, could she have known of the amiable schemes he was meditating, she would have assaulted him then and there, as he stood on the hearth-rug, big, handsome, and absolutely beaming with patronizing benevolence. That he of all men should plan her happiness with another! However, she knew nothing, and only watched him from a distance, as she often watched him now, with none of the old bitterness, but a sort of grey hopeless calm, a very treacherous calm. And after a minute or two Mr. Warburton walked back to the tea-table to put his good resolutions into practice at once.

The couple he had left there had been considerably embarrassed during his absence. Milly was painfully conscious of the look of wondering incredulity with which Mr. Eversley had seen the bond between herself and Matthew. She was ashamed that it should have made any impression on her. John perceived that he had betrayed himself, and was uneasily trying to divine Milly's thoughts, and very much vexed at the remembrance of his unguarded glance. They were drifting into a laborious and disjointed conversation, most unlike their former one, when Mr. Warburton returned, radiantly affable.

He set to work to make himself agreeable to the new-comer in his most genial manner. His overtures were received very courteously by Mr. Eversley, who could not be uncivil, but with a gentle coldness, which made Milly say to herself, "He does not like him. *Why* does he not like him?" What did it signify? And yet she was pained.

When the rubber was made up that evening, Mr. Warburton volunteered to play. He did so purely out of kindness. He would far rather have lounged on the sofa or on the balcony with Milly. But then probably Mr. Eversley would have been pressed into the service, and Bella would have been left disconsolate; so he went away to the card-table, and Bella Mannering came across to the two whom he had left. And while the seniors played whist, these three young people talked. Bella, who was in good spirits that night, was very droll about some of their adventures

at Brighton, and especially about an accident to Mr. Mannering's hat, which had been the occasion of their first speaking to Mr. Eversley, and had led to the discovery that he was the paragon, of whom the Colonel had written so enthusiastically to his old friend the Rector of Drayford. "It ought to have been yours," he said; "it would have been much more romantic."

"Like a novel," said Milly; and she thought to herself that her new acquaintance would have done for one of the characters in a novel. Not the handsome, muscular hero, of course (Milly looked across at the group round the card-table), but one of the pensive, poetical people, who are always grave and gentle, and have secret sorrows gnawing at their hearts. Had Mr. Eversley a secret sorrow gnawing at his heart? Milly was forced to allow that if he had he concealed it fairly well; for, seconded by Bella, he was in a quiet way making himself extremely amusing. There was not much in John Eversley perhaps. He floated lazily on the surface of life—was observant, though not keenly so—fairly well read in the literature of the day (though rather as a clever woman is well read)—but was not very remarkable for anything, except a courtesy which with him was almost a religion, and which, perhaps, was the more easily practised because he had no crotchets or theories. Milly was so unaccustomed to anything like his chivalrous deference that it perplexed and fascinated her. She liked Mr. Eversley, but she felt angry with him when the whist was over, and Matthew came and sat down by her side. But why should that make her feel out of temper with Mr. Eversley? It was unreasonable.

When everybody went away Milly looked after him as he stood aside for Bella to pass, and followed her down-stairs. Then she turned and found Mr. Warburton looking at her as he lay back in an arm-chair with his hands clasped above his head.

"What a clever child it is!" he said; "she has positively found it out!"

"Positively found what out?" said Milly, wonderingly.

Matthew sat up and burst out laughing. "Why, she positively hasn't! Mrs. Rivers, do you hear? Come here, child, and let me enlighten you. Come here."

Milly came, but with a novel sense of reluctance. Did Mr. Warburton usually speak in such a loud imperious tone?

"Why, Milly, where are your eyes? Don't you know what Mr. John Eversley has come for?"

"No," said Milly; "what?"

"Well, do you want Bella for your bridesmaid? Because if you have set your heart on it just tell your aunt you're dying to be married, and get her to give in. I am so naturally amiable that I shan't mind obliging you by making my appearance in church whenever you like. A couple of days' notice, Milly, to get the licence, that's all I ask, and then we'll be off to Paris for our honeymoon—eh, Mrs. Warburton?"

She put her hand over his mouth—"Don't—what do you mean? Is Bella going to marry Mr. Eversley?"

"She has literally and absolutely found it out. Yes, my dear Milly, you've exactly hit it," he said, with a meaning look. "Bella is going to marry Mr. Eversley. Her intentions are remarkably evident."

Milly sat musing.

"Don't you think his are too?" said Mrs. Rivers. "How devoted he looked as he squired her down-stairs!"

"Oh yes, I think he's caught," Mr. Warburton replied, with his broad smile. "A spoony sort of fellow, I should say."

"But a nice gentlemanly young man, I thought," urged kindly Mrs. Rivers, "though he does seem rather shy and quiet."

"Oh yes, gentlemanly enough, I daresay. Bella will have her own way, you may be sure; and as she is particularly fond of that, she'll be particularly fond of him, I've no doubt."

"Don't you be hard on Bella," said Mrs. Rivers. "We know some one who is very fond of his own way—don't we, Milly?"

The girl was a little startled by the sudden appeal, and hesitated a moment before she nodded a laughing assent.

"Milly was in a brown study. Now, Milly, since you've given me a character for having my own way, I'll deserve it. I insist on knowing what you are thinking about."

"I don't know."

"But I want to know. Was it deep grief at the idea of losing Bella?"

"No," said Milly, with a smile; "I think I shall get over that."

"Then you've fallen in love with Mr. Eversley and want him yourself, Milly;" (in a tragic voice), "confess the truth."

Milly laughed. "What would you do?"

"Shoot him and commit suicide of course. Could I do less?"

"And I shall be left with neither of you," said Milly, pensively. "Well, if you will be so unkind and inconsiderate," she looked up into the bold eyes and florid handsome face, "I think I will keep you."

The sentence was finished in his ear, for Matthew drew her down to him. "I *know* I will keep you, Milly, for ever and ever." He was not a man to be trifled with — this Mr. Warburton. If he were angry one would fancy that some savage animal looked out of his eyes. He was not angry now, but the mere idea of any one's robbing him of little Milly gave him a menacing look.

It vanished as Milly laid her soft cheek on his shoulder and began to play with his watch-guard. There was silence for some minutes.

"Time for you to be off, Milly," Mrs. Rivers said at last.

"For 'Milly' read 'Matthew,' and it will apply equally well," said the banker.

"Don't go yet — it isn't late," was the whispered remonstrance.

"I must. Why, you're half asleep already. Come down and see me off."

She did so. And as he struggled into his big rough coat — for although it was but the end of September the nights were chilly — he bade her make haste and get to bed as soon as he should be gone. "And don't go and dream of Eversley, Milly, for my sake and Bella's."

She laughed. "I'm not likely."

He stooped and kissed her in his superbly patronizing fashion. "Good child," he said. Then as she held the door open for him and peeped out into the starry night, he lingered on the threshold.

"This time next year, Milly, you won't be turning me out in this style, eh?"

"No," said Milly.

"Why, we shall be old married folks by then! Milly, I should like to catch you up and carry you off. What a good-natured fellow I must be not to do something violent to your aunt for not letting us have our own way — don't you think so? You'd come pretty soon if she'd let you, I know — wouldn't you, my darling?"

"Ask me next New-Year's Day," said Milly. "Good night." And with a laugh he went.

Half an hour earlier Mr. John Eversley had walked down the silent street along which the banker was striding now, and he had said to Bella Mannering, "Miss Hope is engaged to Mr. Warburton."

"Yes," said Bella. "I suppose Mrs. Rivers has consented to it now. She said at first it was not to be a positive engagement — thought Milly too young, I believe."

"I should think so," said John Eversley, with the same soft coldness in his voice.

"Surely she is quite a child?"

"Nearly eighteen."

"Probably she has lived in Drayford all her life," said John.

"Since she was six or seven years old — her father died then."

"And her mother?"

"Died when she was a baby."

"Poor child!" said John. "An orphan — never having seen or known anything beyond this little town, and deciding her destiny before she understands it. Poor child!"

"Every one thinks it is a good match, I believe."

John's silence was very full of meaning.

"And she is very fond of him," Bella continued.

"And that is just it," said he. "Fond of him — yes, of course she is fond of him. If she has seen no one else, of course she makes him her standard. Suppose she gets her eyes opened any time during the next five years and finds herself bound to that man and Drayford for ever!"

"You don't like Mr. Warburton?"

"Not much," said John; "but," with a start and a glance at Bella, "perhaps he is a friend of yours?"

"Well, yes," said Miss Mannering, frankly. "But it was my fault; I should not have asked the question, only just then I was thinking more of Milly."

"I beg your pardon, I'm sure," said Eversley. "Had I remembered he might be your friend, I would never have said a word."

"No matter," said Bella. "As you would have thought the same, it is just as well to say it, isn't it?"

"I could hardly agree to that," was John's reply; "and it does not bear on this question, for I should not have thought the same."

"What difference could it make?"

"If I had remembered he might be your friend, I should have doubted my hasty judgment. If I had known it, I should have been sure I was wrong."

(John meant what he said, only when he talked of "a friend of yours," he was thinking more of Mr. Mannering than of Bella. If the shrewd gentlemanly old Rector liked Mr. Warburton, no doubt there was good in Mr. Warburton. But, as it happened, the Rector did not share his daughter's liking, but thought him a noisy conceited fellow, and quietly avoided him if it were possible.)

"I suppose, then," said Bella, "you are reconciled to Milly's fate?"

"By no means," was his quick rejoinder. "I am willing to allow — or rather I'm sure — that his faults are on the surface. But they are not suited to each other. He is

too domineering; he will crush all individuality out of her. He treats her like a baby: she is his plaything — nothing more."

"That's true," said Bella.

"His wife should be a woman who would not be afraid of him."

"I think so too," his companion assented.

"Miss Hope is not clever, perhaps," he went on, "but I am sure she could appreciate; — a talent about as useful to her if she marries Mr. Warburton as a latent love of the fine arts to an Esquimaux."

Bella smiled. "Well, she may change her mind before Easter."

"Easter! Is she to be married at Easter?"

"I believe so," — and the subject was dropped.

I am perfectly certain that any moderately-experienced novel-reader knows the occurrences of the next few days as well as I do. I have brought Milly's little story to a point at which it may be suffered to drift on for a little space. Let us suppose rather more than three weeks to have passed, and then take up the threads of these four or five lives again.

They are terribly knotted and perplexed, almost as if some malicious elf had got at the loom in which our little girl's fate was being woven with the others, in and out in a nice, neat, symmetrical pattern, and tossed and twisted them all in the maddest confusion. What is this? Milly's thread of glistening whiteness tangled with the soft, sad-coloured line which marks Mr. John Eversley's fate? This will never do. But who is to unravel this perplexity, so that it may neither be roughly broken nor its brightness soiled? I think it needs more penetrating eyes, and fingers more gently skilful than those of Mr. Matthew Warburton.

That gentleman and Mrs. Rivers, anxious to be kind to Miss Mannering, had made Mr. Eversley cordially welcome. The banker was seldom with Milly during the daytime; and Mrs. Rivers, who daily expected the announcement of John and Bella's engagement, was very glad to leave the three young people to amuse themselves together as often as Miss Mannering liked to call, bringing her devoted squire. This she seemed very pleased to do, and the trio were together almost every day, either in Mrs. Rivers's drawing-room practising singing (they suddenly discovered that their voices went charmingly together), or else they fetched Milly away for a ramble in the fields, or to play croquet in the Rectory garden.

The end of which was, that John Eversley, in spite of resolutions and the stings of an uneasy conscience, fell madly in love with Milly Hope.

And Milly innocently thought that he belonged to Bella, and was always afraid she might be in the way. She liked him very much indeed. She thought him a miracle of kindness and cleverness, and was often haunted when she was alone by the memory of those bright, gentle, brown eyes. Yet she could not understand why the knowledge of John Eversley had brought with it a novel feeling of doubt and unrest; why was she so uncertain and troubled — now unreasonably gay, then as unreasonably depressed?

You have seen a child asleep, half awakened by some one bending over it, lamp in hand. It stirs uneasily, murmurs confusedly, reaches out its hands, almost lifts the drooping lashes. There is a moment's suspense, ending either with a start and full consciousness, or the hands fall again, the cheek is pressed anew on the pillow, and the slumber, if anything, is deeper than before.

John Eversley had let in a gleam of light from the outer world on Milly's dream of love for Warburton. As yet she was not awakened; she still believed that her heart was as entirely given to Matthew as when Eversley's eyes first met her own. But it seemed barely possible that the catastrophe could be much longer delayed, almost miraculous that it had not already occurred. A word or a glance, and Milly must surely wake to a sense of the coarse and common nature of her idol, and see the difference between his violent yet half-contemptuous love, and John's simple devotion.

Bella Mannering had seen it all. At first she stood aside, and suffered events to take their course. If Mr. Eversley was always wanting to be at Mrs. Rivers's house on some pretext or other, she would not hinder him. He and Milly might do as they pleased. She would never betray them to Mr. Warburton, but it was not her duty to guard his interests. If Milly was free, Bella supposed she might flirt with Mr. Eversley; if not, Mr. Warburton had better come and look after her.

But as the days slipped by, Bella grew fonder and fonder of the innocent rival who had robbed her of her prize. She had begun by being a contemptuous spectator; she ended by feeling a purer and sweeter interest in John's hopes and fears than in her own bygone desires. She would not seek Milly's confidence lest she should involve the girl in any difficulty. Neither did Eversley absolutely tell her the story of his

love, but she understood and sympathized with him, and he knew it. I will not say that she was utterly unconscious that his victory might prove hers also, but I do say that such a thought was not her principal motive.

Eversley felt that his stay at Drayford could not be indefinitely prolonged, and had been for a considerable time talking of departure. But every suggestion had been met by the Rector with eager remonstrances. Again and again had his visitor yielded, but he felt none the less that when a visit of a day or two had lasted a month, it must be drawing to a close.

Breakfast was over at the Rectory, and Mr. Mannerling had gone to his study. John leant against the window, looking out.

"Was that Arthur went by?" asked Bella.

"Yes—in a hurry apparently."

"Papa spoke to him last night, so I suppose he is out of temper, and we shan't see any more of him to-day." She gave a quick little sigh: "What are you going to do?"

"Rather—what are you going to do? Are we to have a walk this morning?"

"I should like it very much, but I can't go yet. I have these lists to copy out for papa."

"Can I help you?" turning round quickly.

"No, I don't think you can. I shan't be very long. Suppose you go and fetch Milly: if we go to the wood, it will be all out of our way to go to Mrs. Rivers's first."

John's face, which was turned to the window again, brightened suddenly, and he went off on his errand as light-hearted as a schoolboy who has just got an unexpected holiday; and being shown up into the drawing-room, he found Milly alone.

"I am Miss Mannerling's ambassador," he hastened to say. "We are going to see that remarkably beautiful wood you were talking about a day or two since, and she wants to know if you will come with us."

Milly's face fell. "Oh, I should like, but I can't. Aunt Harriet has promised to lunch and spend the day at Mrs. Thorne's."

John's disappointment was manifest. "What time must you go?"

"It's seven miles. We start at twelve, and it's twenty minutes to eleven now, and I dress first."

It was very evident Milly could not go with him to the Rectory, start for a long country walk, and get back and dress, in an hour and twenty minutes.

"I'm very sorry," said John.

"So am I. Well, you will be going somewhere else another day, and you must let me go with you then," said Milly; and added, in a matter-of-fact tone, "I hate Mrs. Thorne."

"So do I," was the fervent rejoinder. "You can't get off, I suppose?"

Milly made a despondent little face, and shook her head.

"I'm very sorry," he said again. "I didn't want to miss one of our walks, especially when my visit is coming to an end."

"Is it?" said Milly—"already?"

"Why, I've been here a month. Yes, I must be off soon now."

"But I suppose you will be back again before very long, won't you?"

John looked surprised. "Why? No; I'm afraid there's not much chance of that at present. I hope I may see Drayford again some day, but I'm sure I don't know."

It was Milly's turn to wonder. "But, Mr. Eversley, I thought—I mean, surely Bella—" and she stopped, scarlet with confusion.

He took his elbow off the chimney-piece, and came a step or two nearer, with a startled, inquiring look.

"Miss Hope, will you tell me what you do mean? Pray do—don't be afraid," he added, seeing the hot colour in her cheeks. "I will promise not to mind, whatever it is. Do tell me," he urged her gently; "I really want to know. Why were you so sure I should be staying in Drayford again?"

She hung her head. "Are not you engaged to Bella, Mr. Eversley? They said you were."

His pale face was a shade paler. He was thunderstruck. "Who said so? Good heavens! you have thought that all the time!"

"Isn't it true?" said Milly.

"No," he cried. "Miss Hope, how could you fancy it—how could you? Why, we never dreamed of such a thing!"

"I don't know," she began; "but—"

"Hush, here's some one coming—confound them!" said John the courteous; but he added a hurried "Pardon," just before the door opened and Mrs. Rivers came in.

He briefly contrived to explain how Bella had sent him to fetch Miss Hope for a walk, and how sorry he was to find she was unable to join them.

"No; I can't spare her this morning," she said. "We're going out for the day; aren't we, Milly?"

Milly assented.

"To-morrow, perhaps?" Mr. Eversley suggested. "Miss Mannering will be disappointed, I know, when I return alone. I should like to be able to tell her our expedition is only postponed."

"To-morrow by all means, if Bella likes. You have nothing to do to-morrow morning, have you, Milly?"

She was stooping to play with the great tabby cat which was curled on the hearth-rug. "No; I should like to go."

"We will come for you, then," said John. "At the same time?"

"Please. Give my love to Bella. I hope you will have a pleasant walk."

"We will save the wood for to-morrow," he said, and with that he took his leave. Milly did not dare to look up when she shook hands with him. John Eversley not engaged to Bella—a free man. She hardly understood why, but the news came upon her with a shock of painful surprise.

As she drove home late that evening with Mrs. Rivers, the latter said, "My dear child, have you lost your tongue? You haven't said a word for the last half-hour. I think I must tell Matthew how silent and absent we are when we miss seeing him one day."

"Please don't," said Milly, and she went on musing. The wood to-morrow, and John Eversley was not going to marry Bella. Why did he look at her so strangely that morning? What did it matter to him what she thought?—he knew she was going to marry Matthew. He did not like Matthew, she knew from the way he looked at him. But then, what did that signify to her? She had always loved him, always should. She wished Mr. Eversley had never come down to Drayford, looking in that cold, surprised way at people. And yet she was sorry to think she should never see him any more.

Our little Milly was dangerously near her waking.

John Eversley found a letter by his plate when he came down to breakfast the next morning. "Oh, from my brother—he's in England again, then," he said. He opened it and began to read. Presently he looked at the envelope with a puzzled expression. The writer evidently supposed him to be in London, yet had directed the letter correctly enough to Drayford Rectory. He turned the last leaf, and read—

"P.S.—Just got a line from the governor, saying you are at Drayford, of all places in the world. I don't suppose you have let the fact of our relationship be suspected; be careful it doesn't slip out by accident,—there's a good fellow. People may have forgotten all about it;

but, on the other hand, they may not. I'm a different fellow now, I hope, and I don't want to have anything more to do with that miserable, disgraceful time. So don't say a syllable about me, not even to Warburton. Is he at Drayford still, by the way? How does he look, and how is he getting on? He is a good fellow, if ever there was one. I don't like to think where or what I might have been if it hadn't been for him."

John read this postscript through twice very slowly. At the end of the second reading, his thoughts, if not remarkably coherent, were clear and to the purpose.

"Matthew Warburton saved my brother from utter ruin. I must leave Drayford in time to catch the 1.25 train."

Suddenly he became aware that Mr. Mannering was saying for the second time, "I hope you haven't any bad news, Eversley?"

"I beg your pardon," he exclaimed. "Yes, I have some news which certainly is bad, because it makes it absolutely necessary for me to be in town to-day."

"To-day!" was the general chorus.

"I'm very sorry," said Eversley, with his eyes fixed on his plate; "though I must have gone in a day or two. Indeed, as it is, I have trespassed on your hospitality —"

"No, you have not," said the Rector.

"Well," said the young man, "I don't like running away in this style. However, it can't be helped."

Bella took the earliest opportunity of saying to John Eversley, "I hope it was not very bad news in your brother's letter?"

"No," said John, absently.

"We must let Milly know that we can't go for our walk—our unlucky walk. Perhaps I had better write a note."

"No—send me. I want to say good-bye to Miss Hope."

"You will come down to Drayford again soon, I hope," said Bella; "so perhaps it will only be good-bye for a little while."

"No," said John, calmly, "it will be good-bye for ever." And he looked straight at her as he spoke, with his grave eyes.

"Mr. Eversley! What do you mean? I don't understand. Has Milly —"

"Milly has done nothing, and knows nothing," said John, with a curious, sorrowful smile. "No, I have been wrong all the time, I think. I only hope—" He stopped abruptly, and then resumed: "I know you think that letter was only a pretext, and that something else sends me away from Drayford. But it isn't so. I am going solely on account of the letter."

"Then why not come back to us?" said Bella.

"Perhaps we may meet again — at Brighton — who knows?" said John. "I hope so."

"Not here?"

"No. This letter must be a barrier between me and Drayford."

"You are very mysterious."

"Believe me, I cannot help it. You will forgive my mystery, won't you?"

"Yes," said Bella; and added suddenly, "and respect it."

"Ah, that is like you!" said John, gratefully, holding out his hand. He detained hers for a moment. "I don't know how to thank you for your kindness," he said.

"There is nothing to thank me for," said Bella. The words were cold, but she looked almost wistfully into his face.

John went to the window and looked out.

"Will you go to Milly now, please?" said Bella, after a pause. "She will wonder why we don't make our appearance." And without a word he went.

It was a crisp, clear October day; there were but a few leaves on the trees, and every branch stood out sharply against the pale blue sky. Eversley, as he walked, looked sadly at the pathetic beauty of the autumn scenery. He hardly knew what he looked at, but he remembered afterwards. And as he went, he said, half bewildered, to himself, "Good heavens! That man saved my brother. Yes, saved him from shame worse than death, and I was within an ace of requiting him by trying to steal Milly away from him! Here have I been thinking him a noisy conceited snob, and the generous fellow has been doing good in a thousand secret ways, no doubt, as he did that once. God help me! carping and cavilling at faults of manner, and never able to see the true and sterling manhood underneath. Well, that good deed of his has borne fruit at last. My sister could not be dearer to me, nor more sacred than Milly henceforth, nor could I be more loyal to a brother than I will be to Matthew Warburton."

He walked on a little, vaguely musing. Then his thoughts, though still confused, flowed on once more.

"Next post and it might have been too late! Now that's what I call providential. I was on the brink of a deed I should have repented all my life — nothing to stop me — an hour or two more and it might have been accomplished! God grant I've not done any harm already! And I was vexed and angry because she had misunderstood me!"

He went on a little further, still like one in a dream. But when he was but a hundred yards from Mrs. Rivers's door he came to himself with a shock, and summed all up in a passionate silent cry from the very bottom of his heart.

"My little Milly — my little sister! My brother's wife! It's bitter, but how merciful! Thank God!" And walked the brief remainder of his way bracing himself for the work he had to do. He was at Mrs. Rivers's door. He had resolved that if he should not find Milly alone he would ask her to come to the Rectory with him, and say what he had to say on the road. But Fortune, who had just overwhelmed him and laid him low, gave him this pitiful little mark of favour, to find Milly waiting for him, and Mrs. Rivers gone out. Like the little indulgences they grant to men condemned to die, thought he as he crossed the threshold.

She came forward to meet him with happy shining eyes. "I'm ready *this* morning, Mr. Eversley."

"And I am not," said John, abruptly. "Not ready? Why? Is anything the matter? Can't Bella go?"

"I must be in town this afternoon. I have had a letter, and I'm going away in an hour or two." He hurried the words out, answering her questions and yet seeming somehow to put them by. He felt as if he had kept his eyes averted from the first, and yet he knew that she was very white. "So you see," he went on, "there won't be time for our walk — in fact I've come to say good-bye."

She was stunned. "And you are not coming back?"

"Not for some time at any rate," said John, with what he intended for a remarkably cheerful smile. "I don't suppose I shall ever see *Miss Hope* again; you will be a married lady long before I return, and I shall come and call on you in a dignified manner."

"Perhaps," said little Milly. So John Eversley had only been startled at her thinking he was engaged to Bella the day before. He had not meant what for a moment she had almost fancied he must mean. She reddened at the mere thought of her incredible folly. She was honestly glad, she was very glad, she felt as if she were delivered from some nightmare of perplexity, and yet her heart was aching with a sudden and most bitter sense of loneliness.

"Well, I suppose, in a way, everything is a 'perhaps,'" said John. "But I should like when I am far away and recalling my Drayford friends, to think of your marriage

as something more. Mayn't I congratulate you now, Miss Hope, as I may not be in England when the time comes?"

"Thank you," said Milly, looking earnestly at the toes of his boots.

"I have been very happy here," said John, after a pause. "There is something I should like to say, if you would not mind. I have always wished I had had a sister—an idle, indefinite sort of a wish, you understand. Now I know what I should have liked—a sister like you, Milly."

It slipped out unawares. She flashed back a glistening glance which went straight to his heart. Yes, she would have liked that—John for her brother, and Matthew—ah, if he had liked Matthew!

"Well, I ought to be content," he resumed, after a moment. "Had you been my sister, I could not have left you in better keeping." (He meant it, the man who could secretly show such noble generosity to a comparative stranger might well be trusted to be true and loving to his wife.)

Little Milly looked up surprised. "Mr. Eversley!"

"Well?"

"I thought you didn't like Mr. Warburton?"

"But I do," said John, earnestly. "I am ashamed to say I did not at first. I did not understand him. I did not get below the surface—and, after all, that is of very little importance. I know now that he is very good and generous, though, if you will pardon my saying so, I think he rather hides his better nature. I know that he is capable of very unselfish and noble deeds, and that he does them in secret. You may well be proud of your future husband, Milly, as I daresay you are."

"Yes, yes, I am proud," she said, confusedly. But she looked at John Eversley with different eyes; she was not thinking about him any longer. They were the eyes of the girl who had loved Matthew Warburton from first to last. She honestly believed she had, while in truth it was a new passion rising on the ruins of the old. She had loved Matthew first in ignorance of his faults, and now was suddenly justified in loving him in spite of them. John Eversley was a dear, dear friend, but never had been, never could be, anything more.

He looked at her and saw that he had in one moment killed the newly springing flower of love he would have given all he possessed to cherish. He had tried to do it—he was honestly glad he had done it—but he would ten times rather have killed himself.

"Remember me very kindly to Warbur-

ton, Milly," he said. "Tell him I congratulate him—as sincerely as I congratulate you. But don't tell him what I have said of him—he might not be pleased at our chattering. And now I must say good-bye."

She gave him her hand. "Good-bye, Mr. Eversley. But do come back again. Please."

"One day, perhaps," said John, smiling. "I shall hear of you sometimes, from Bella. God bless you, little sister, and good-bye."

He lifted her little hand to his lips and was gone.

From London he wrote to his brother:—

"I left Drayford the very day your letter came. I never heard your name mentioned, and no one imagined for a moment that I was connected with any Lisles.

"I am just off to the Continent for a little while, but I will certainly manage to see you before you go back to Canada. Your friend Warburton is doing well; the Drayford people seem to think a great deal of him. I believe he is going to be married in the spring."

John Eversley was away for some months. There was a slim, melancholy gentleman at a hotel in Paris, pacing wearily to and fro, on New-Year's night, when Milly sat with Matthew by Mrs. Rivers's fireside, happy in the possession of a new watch and chain, and, above all, happy in the possession of her lover.

But he had crossed the Channel and was in London on an important day which had been named in a hurried note in Bella's large handwriting—a day when Drayford bells rang merrily, and the sweetest and shyest of brides, with a dear little childish April face, came down a flower-strewn path with her big, beaming, handsome bridegroom by her side. Of course the latter made a great speech at the breakfast, eliciting burst after burst of laughter and applause, while little Milly hung her head, and blushed at every complimentary allusion to herself. Of course there were plenty of good wishes, of champagne-drinking, of hand-shaking and kissing—Mr. Warburton getting quite his fair share of the last, I believe,—and a perfect hail-storm of white shoes as the carriage drove off. And John Eversley, who, thanks to Miss Mannerling's note, knew the train by which the happy pair were to start, pictured the jubilant departure, and said softly to himself, "God bless her! God bless them both!"

He waited in town till he got a letter the next morning, just a single hasty line;

then he hurried home to see his brother, who was going away in a few days.

It was afternoon. John was leaning with his back against the chimney-piece in the dingy room which was called his father's study. Through the window he could see the dark tangled little plot, ironically supposed to be a flower-garden, and further off the grey church-tower among the clustered elms. His hands were in his pocket and he was absently staring at the trees and sky, and listening to the birds which twittered among the budding boughs.

George Lisle sat on a low chair with his legs across a rather higher one, smoking a short pipe. He was a fine young fellow, a little rough and sunburnt perhaps, but much handsomer than John. The brothers had been apart for years—in fact they had never been together for any time since they were lads; and George, looking at the melancholy man of five-and-thirty who stood by the fireplace, could hardly believe that this dignified Mr. Eversley of Brooklynn Hall could be the "old Jack" of bygone days. They had been delighted to meet—had grasped each other's hands—looked, with eyes glistening with brotherly affection, each into the other's face, and then had discovered that they had nothing to say. A happy remark set them recalling boyish adventures. These being in some degree exhausted, each had begun to ask about the other's more recent doings. But George was a man of few and practical words, and his more fluent brother was curiously reserved. So they had been silent for some minutes, and then the elder broke the silence.

"You needn't have been afraid, George; no one seems to remember you at Drayford."

"So much the better," said the younger.

"Of course I kept the secret. Your friend Warburton is well."

"That's all right. Oh, by the way, you said something about his being married?"

"Yes," said John, in his slow, gentle voice; "he was married yesterday."

"Yesterday! Well, I'm sure I wish him all happiness, and I hope he's got a good wife."

"Indeed he has," said John, with shining eyes.

George was lighting his pipe again. After a puff or two, he said, "Well, if ever man deserved a good one he did. Dear old Geoff!"

John drew his breath sharply as if he had been stabbed. "What!" he exclaimed.

His brother looked up in some astonish-

ment. "I only said he deserved a good wife, if ever man did."

"But you called him—*what* did you call him?"

"Oh, Geoff. I always called him by his Christian name."

"But his is not—Geoff," said John, bringing the last word out with a gasp.

George stared. "I should like to know what it is, then?"

"Matthew!"

"Not unless he's changed it. Matthew! What are you talking about? It was Geoffrey when I knew him."

"No, no," said John, who was awfully white. "It's a long time ago, you must have forgotten."

"What's the matter?" said George, tumbling his long legs off the chair and sitting bolt upright. "Nonsense about forgetting. I know his name as well as my own. Oh, well, you needn't believe me unless you like: just you get the governor's Clergy List—I see it on the bottom shelf there—and you'll find him sure enough, the Rev. Geoffrey Lionel War. . . . Jack, old fellow—Jack, what is it?"

For John, quiet courteous John, suddenly burst out with an oath, and then with a queer laugh turned away from his brother.

"You had better a thousand times over have stabbed me or poisoned me than sent me that cursed letter," he said at last.

"What is it? what have I done?" cried the bewildered George. "Tell me Jack, —I'm very sorry."

But John gave him no answer. George tried to see his face, but could not. "Matthew," said Lisle, half to himself, "Matthew—why, that was some sort of cousin of his at the Bank. Mat Warburton the fellows called him, I remember now. He had a fever or something very soon after I got there, and went away for a holiday afterwards. I never knew anything of him. I say, Jack, is it he that is married, and not old Geoff? Tell me what mischief I've done—there's a good fellow. I'm sure I never meant—"

But John suddenly turned a white menacing face towards him, and George understood that, for the moment, his brother's mysterious agony was too deep for explanatory words.

The Folkestone boat slid pleasantly through a softly-whispering sea. There was just a faint breeze, as if April drew a glad breath of wonder at the freshly unfolding beauty of the world. The ocean was a floor of burnished silver under a sapphire roof.

A big gentleman is pacing to and fro,

smoking a big cigar, but he stops pretty frequently to speak to a little lady, who, carefully cloaked and sheltered, sits on one of the benches, rejoicing in what is almost her first sight of the sea. But her eyes, delighted as she is with the glittering grey waves, leave them from time to time to follow her handsome husband. And when he speaks, she answers with glad uplifted face and happy smiles. For is not everything new and wonderful? and was there ever any one so kind and noble as her husband? and is not Mrs. Matthew Warburton going to spend her honeymoon in Paris?

My story ends with April 1869. A word or two concerning these friends of ours at the present time and I have done.

John Eversley has neither gone mad, nor shot himself, nor died of a broken heart. He has given up wandering, and lives on his estate. If anything, he is rather more gentle and silent than before, but that is all: he is not like King Henry—he smiles sometimes; only unfortunately it is just then that you understand how sad his face can look.

Bella has known bitter sorrow during the past year. Mr. Mannering died suddenly, and the shock was too much for his ailing wife. Their parting was only for a month. Much wonder was expressed as to what Miss Mannering would do, but she turned it into surprise by announcing that she was going with her brother to Australia. "I hope, my dear, you have considered it well," said Mrs. Rivers, agast, across the luncheon-table.

"Yes," said Bella, calmly, "I've considered a good deal. I think it is the only chance for Arthur, and I've no one else left now. He has promised to make a home for me."

"And if he ruins himself?"

"Why, I suppose he'll ruin me, and that is just what makes me hopeful. If I were safe, I could not help him. At any rate I'll risk it."

She looked so quietly resolute that little more was said. I am not altogether sorry for Bella. Her upward path is toilsome, but it is something to be rising higher day by day. Bella, in her sombre crape, with cheeks that have lost their damask bloom, and are more like rain-washed Christmas roses, and with clear eyes looking out to the home across the sea, is better, and, I will believe, happier than had she been Mr. Warburton's wife. She bade him good-bye with a sort of wistful seriousness. "I shall often think of you and Milly," she said, "and hope you are happy."

Matthew Warburton was touched. "Good-

bye, Bella, and God bless you!" he said. She had enough of the old tenderness remaining to value the benediction.

Any good wishes which she may bestow on Matthew are likely to be fulfilled. He is happy, and I am glad to be able to write it. He is good enough for me to rejoice in his prosperity, especially as I doubt if he is good enough for sorrow to make him better. He has the desire of his heart, and his satisfaction is written legibly on his face.

And Milly? She is happy too. I will not say that nothing in her husband's words or manner ever jars upon her, but such jarring gives her little pain. She acknowledges frankly to herself that there is something loud and coarse in the outward man. So be it. She is content to worship the generous nature which it masks.

She is the brightest, yet the most anxious of little housekeepers.

She impresses upon her servants, in her clear bird-like voice, that "Mr. Warburton likes this," or "Mr. Warburton does not like that," and generally that "Mr. Warburton is very particular." She thinks she is very dignified and capable. The servants know that their master's eyes are keen, which comes to the same thing.

Her manners, in the opinion of Drayford society, are immensely improved. She does not blush so readily, or look up with quite such an ingenuous desire to please into the eyes of any one she may talk with. But there is not any real difference. In the evening when they are alone she sits on Matthew's knee (if he is inclined to be frivolous), twists her soft little fingers in his big whiskers, and talks her pretty childish nonsense. He is good-humouredly amused."

"Tell you what, Milly," he would say, "I daresay you think you look like a married lady. I wonder people don't ask you to the children's parties."

"It would be great fun," said Milly. "I like blind-man's buff, and sandwiches, and custards, and orange wine."

Matthew made a wry face.

"You could come and fetch me home at eight o'clock," Milly continued. "It's your own fault. What did you marry me for? Why didn't you have aunt, if you wanted somebody dignified!"

"Thanks," said Mr. Warburton; "but I know somebody, not a hundred miles away, who wouldn't have liked that. Somebody who looked uncommonly melancholy, I can tell you, when she thought I *did* care for somebody else."

Milly had to raise her head and show a

glowing face. "Oh, what a lot of somebodies!" she said.

"Ah," said Mr. Warburton, with his great happy laugh, "but only one somebody for me."

Yes, Milly is happy, and I don't know why she should be otherwise. But I cannot as cordially rejoice in her happiness.

Yet is it not best? Suppose she had opened her eyes, and loved John Eversley, and they had gone away to live their lives together, would that have been a perfect ending? Would little Milly have been quite as childishly sweet and pure, if she had broken what she considered a sacred bond, and been faithless when she thought her faith was pledged? I think not.

Or, on the other hand, could I have been so well content had I left her worshipping the Matthew Warburton who was known to all the world? It was to be regretted when

she knew no one better, it would have been degrading when she did.

Why then, after all, is not this the best ending of all? To have her first love ennobled and idealized so that she was able to be true to herself in being true to it, to have even that coarseness and vulgarity which might have kined love turned into lessons of a yet higher love looking beyond the ignoble husk to find the noble heart — why am I not resigned to my little heroine's fate? She fell in love unwisely — many girls do; she is sheltered from some of the saddest results of her folly — many are not. She is not degraded by her dream, and there is no fear of a dreary waking.

I look back at what I have just written. I cannot deny it, I cannot say how I would have had it otherwise; I cannot be angry with Milly for her first mistake. "But the pity of it! oh the pity of it!"

F. MULHAUSEN, civil engineer of Brunswick, has invented, according to the *British Medical Journal*, a new freezing and ventilating machine of remarkable ingenuity. The cold is produced by the mechanical expansion of atmospheric air. It produces, when in operation, any desired degree of cold, freezes water without the use of any chemical agents, and will effectually cool and ventilate any apartment or building, on whatever scale, large or small. In hospitals, especially in tropical climates, where the productions of ice and the cooling of the air are often matters of great urgency, and always of great value, in theatres and workshops, and in our new Indian barracks, such a machine will be of infinite value. The London theatres can hardly afford to be without it. The labour of one man, with a small 5-horse motor power machine, will produce 100lb. of ice an hour, and cool 15,000 cubic feet of air from 80 deg. to 50 deg. below Reaumur (*sic* in *B. M. J.*). The production of pure ice, for the purpose of cooling our drinking-water and furnishing a cheap mode of replenishing our domestic refrigerating safes during the hot season, will be a great addition to the sum of comfort in London life. Cheap ice will be especially a great boon to the hospital and sick-room; nothing is so refreshing for the parched lips of the sick man. If it were not so costly as it is now, ice would be very largely used in all hospitals, and would be an infinite boon to the sick.

conducted in sharp Christian countries. With the commercial reports from her Majesty's Consuls in Japan which have just been issued are printed "some scattered remarks on commerce by Kato Sukeicki," in which he says: —

In trading with the foreigners there are many things which ought to be attended to. The first thing to be noted is that foreigners are skilful in trade, and know how to artificially glut the market. Say, for example, that the price of silk is 800 rios a pical. First of all they buy some at 1,000 or even 1,500 rios a pical. Our merchants hear this and compete with one another in bringing their silk to market. The foreign merchants watch the time when the market is fully supplied, and then, all at once, they purposely abstain from buying altogether. Some of our merchants have brought their goods a long distance, and others have goods purchased with money which has been obtained at ruinous rates. They can neither sell them nor return to their provinces without selling them, so they are obliged to let them go at a sacrifice. The foreign merchants wait for this, and buy the goods for most nothing. The high prices offered at first are nothing but ground-bait, then they watch till the fish are gathered together, and throw the great net. These schemes of theirs redound to the benefit of their country, and we should not grudge them their success, but what a loss to Japan! Of course, every merchant thinks only of his own losses, but the country in general suffers along with him. In such cases if we had companies they could buy up all the goods, and thus prevent them being sold at a sacrifice. If they then held them back foreigners would naturally be obliged to come forward by-and-by, and offer a proper price. There would be no difficulty in buying up goods in this way. If there is a company of 1,000 merchants, they have only to subscribe 100 rios in order to purchase 100,000 rios worth of goods. In Osaka especially, where so many wealthy merchants are congregated together, there would not be the slightest difficulty in raising 100,000 or even 1,000,000 rios if this joint-stock company system were properly established.

THE Japanese seem to be acquiring a very fair knowledge of the principles on which trade is

Pall Mall Gazette.

From The Spectator.
BARBARIANS AND BRUTES.

SIR JOHN LUBBOCK'S remarkable address at Liverpool on the "social and religious condition of the lower races of man," contains certainly the most complete conceivable proof that in all human communities of which we can trace the history, the tendency has been upwards, and not downwards,—a history of progress, and not a history of degradation. But we wish Sir John Lubbock had added to his lecture something which he, of all others, is best qualified to add, on the widely different results of the observations of the naturalist who watches and describes the habits and instincts of animals, and the observations of the student of the earliest stages of human history, who watches and describes the habits and customs of barbarous men. Curiously enough, every feature Sir John Lubbock has contributed to the history of barbarism,—and no one has so good a right as he to be called in some sense the historian of barbarism,—is a feature tending to distinguish man from the brutes, or, at least, to distinguish essentially the characteristic brutality of man from the brutality of brutes. Take any one of Sir John Lubbock's curious list of savageries, and you will find that, intellectually speaking, it constitutes not a link between civilized man and the lower animals, but a chasm between them. He quotes, for instance, at the very outset a celebrated saying of a negro to Captain Burton. "What? Am I to starve while my sister has children whom she can sell?" Now, is not the feeling of civilization about the claims of children on their parents far more nearly an intellectual reflection of the instincts exhibited by almost all the lower animals with relation to their young, than a development of this savage sentiment? Where is the bird that will cast one of its young to the hawk to save itself, or the doe that will not fight far more fiercely for its fawn than for itself? The self-assertion of this savage selfishness represents a gap between civilized man and the lower animals, not a link. Then take the practice,—of the great prevalence of which among savages Sir John Lubbock produces curious evidence,—of the father's going to bed with a new-born child, while the mother gets up and does all the work of the household. Is not this, again, a case of a capricious break in the chain between animal instinct and civilized sense? Or take Sir John Lubbock's account of the extravagant passion of the savage for not only artificial, but positively inconvenient and painful orna-

ment, such as bones stuck through the nose, studs in the cheeks, and so forth. Without saying that civilized man, or at least woman, has entirely abandoned all these savage practices, is it not evident that the tendency of civilization has been to abolish the inconvenient ornamentations of savage vanity, and to return towards the simplicity of the unconscious creature? Again, consider Sir John Lubbock's remarks on the laws of savage tribes. It is often supposed, he says, that savages are personally more free than civilized men, but "there cannot be a greater mistake. The savage is nowhere free. All over the world his life is regulated by a complicated set of rules and customs as forcible as laws, of general prohibitions, and unjust privileges." "The Australians," for example, "instead of enjoying perfect personal freedom, as would at first appear, are governed by a code of rules and a set of customs which form one of the most cruel tyrannies that has ever perhaps existed on the face of the earth, subjecting not only the will, but the property and life of the weak to the dominion of the strong." Of this, again, there is no trace among gregarious animals; for though one tribe will prey upon another, creatures of the same kind, like bees or beavers, live for the most part in instinctive peace and order. And here again, the great aim of civilization is to strike off the alien yoke of tyrannic law and custom which barbarism imposes.

Again, in the relation between the sexes, the most marked distinction of savage life is the violence with which woman is habitually treated, being carried off at first by violence, and reduced to the position of a kind of slave afterwards. Here, again we find nothing parallel in the life of the lower animals, and we do find much more trace of fidelity. A Kandyan, expressing his scorn for a rather exceptional savage, a Veddah, cited in proof of the contemptible character of the Veddahs that they remain true to one wife till death, which, said the Kandyan, was *exactly like the practice of monkeys*. What Sir John Lubbock thinks the most common rule of marriage in the lowest savage tribes, the system of communal marriage, is certainly not an improvement on, but a deterioration from, the habits of the higher brutes. Of religion of course there can be no trace in the brutes, and the mere power of fancying and speculating, however rudely, on the unseen, is, of course, a great advance in *faculty*; but the first *result* of that power, as in the lower religions described by Sir John Lubbock,—for instance, the worship of the serpent,

because of its deadly venom, — is to start man off again on the track of mutilation of nature, instead of conformity to it, such as we see in the animal world. Any one who follows Sir John Lubbock carefully through his description of savage customs and habits, will see, in almost every one, not a link, but a chasm, between the life of what is called instinct, and the life of what is called educated reason. Formulated selfishness and caprice are the very essence of savage customs. Unselfish and orderly instincts, which produce many of the effects of the highest intelligent organization, are of the very essence of the animal life in the stage beneath. The more we learn of the lowest types of barbarism, the more clear it seems that the first stirrings of human character were not "improvements by the method of natural selection" on the habits of the brutes, but in most cases absolute *deteriorations* on those habits, due to the disturbing power of self-will and caprice. Men instead of gaining an advantage over the brutes by their rude attempts at laws, and by the suggestions of their superstitious fears, distinctly lose by them. In the struggle for existence with the lower animals, savages are weighted, handicapped, by their chief social and religious rites, and only their superior cunning as foes enables them to win the battle in spite of these disadvantages. The principle of "natural selection" might, of course, explain how the cunninger creature gets the victory over the less cunning, but it will not explain why cunning, once developed, rushes into so many pure insanities of artificial custom, law, ornament, and incantation, — insanities positively prejudicial to the race, and which are extinguished one by one as civilization begins to study and apprehend the limits of existence.

It seems to us that the new investigations of the facts of savage life all go to show quite as wide a *natural* distinction between man and the lower animals as the old assumptions of the deteriorationists. There must be a distinctive sense of self-guiding capacity and of inchoate desire to use it effectually, in those random gropings after better rules of living than the inexorable power of habit had imposed on the lower animals. The fruits of a past eternity of slowly improved habits, — supposing that to be the Darwinian history assigned to the ancestors of man, — could not result in this burst of wild caprice, in these haphazard attempts to make his lot happier, and to beautify his person, by arbitrary and mischievous rules. You can only account for those wild lashings-out *against* nature, which

are observable in the first moral and social experiments of barbarous man, by his dim consciousness of possessing a power of ruling himself and ruling the world around him, which is neither observable in any other animal, nor yet justified by its first tentative efforts even in man himself. If the savage is more loaded physically with ugly ornaments, and morally with still uglier laws, than any civilized being, is it not clear that his blind sense of power was not, in its initial state, an advantage to him, but a disadvantage, and yet that it was so strong within him that it would image itself in all sorts of arbitrary whims in spite of that disadvantage? Now, what is utterly incompatible with all the laws of nature, including those of animal life, is any thing arbitrary or capricious. Mr. Darwin shows that the moment any variety of type develops itself which is disadvantageous to the race to which it belongs, in the circumstances in which it is placed, there is an immediate tendency to extinguish it. How, then, could a variety arise and prosper whose distinctive characteristic was an arbitrary self-will, — a disposition to cast about in the world for a larger measure of happiness than the average of that species could enjoy, and to adopt the most injudicious methods for securing that happiness? Surely, unless such a characteristic were accompanied by some great and critical rise in the dead level of his intelligence above that of other animals, such a creature would be immediately extinguished in the struggle for existence. You can in no way imagine the gradual rise of self-will, and vanity, and superstition, and the other distinctive forms of savage life, as animal tendencies simply engrafted upon the ordinary animal cunning, — for they would be so adverse to the existence of the creatures in whom they sprang up as to cause their extinction. An elephant impeded by a bit of wood stuck through his trunk by way of ornament, or a baboon subject to the superstition that particular stones had the power to kill it, would clearly have a very bad chance with other elephants and baboons. What we seem to see in Sir John Lubbock's investigations is the proof that man is a species raised a whole stratum of intelligence above the animals next in intelligence to him, or he would not survive the enormous disadvantage of the growth of an imagination and of social passions, the *first* stirrings of which are not advantageous, but dangerous and anarchical. To our minds, the new lights we are getting upon savage life go a great way towards proving that the human race cannot be a variety produced by the Darwinian law from lower races, simply be-

cause the varieties of living introduced into the universe by the germinal human faculties are so distinctly unfavourable varieties of living, varieties which have all to be cleared away as reason takes its fuller development, and the imagination begins to understand the limits within which it works under the divine law.

From The Saturday Review.
SHORT-SIGHT.

IN the præ-scientific days of Aryan mythology, before Creuzer, Bopp, or Grimm had supplied the key which eventually laid open the true meaning of so many ancient myths, an interpretation of some ingenuity, to say the least, was suggested by an imaginative critic for the well-known fable of Medusa. In those uncritical days, when no one dreamt as yet of a meteorological basis for the graceful or direful myths and legends of the Greek Pantheon, there seemed no great liberty in conceiving the *μυθοποιός*, the poetic allegorist or legend-maker, to have impersonated in such or such a form some prominent type of human life or class of character, some exceptional trait of age or nature, be it on the physical, the moral, or the æsthetic side. Apollo chasing the flying nymphs, instead of the sun dispersing morning mists, might be understood as youth in its warmth and vigour chasing the fleeting pleasures and graces of life's dawn. The terrible Gorgo, the mortal one of the three sisters of whom such wondrous stuff is discoursed by Anthon and Lemprière, whose glance turned all who looked upon her into stone, was simply — prosaic as the thought may be — the short-sighted girl. The same idea was implied in the three Gorgones having no more than one eye between them. Having provoked Minerva — in modern phrase, having turned blue, gone in for woman's rights in learning, and so forth — Medusa had been stricken blear-eyed, her locks unkempt and snaky, and her whole aspect such a fright as to petrify every beholder. We are not going to uphold this theory in the face of Mr. Cox, but we would invite attention to what there may yet be discerned in it of psychological or social truth. The stony stare, the lack-lustre eye — which seems somehow never in focus with the eye that looks into it, and suggests the soulless gaze of a photograph, especially where the sitter is blue-eyed — are not these well known to all people of normal if not exceptionally long vision who associate much

with short-sighted folks? People of long sight are for ever taking offence, or being chilled in their friendship, because their distant salute is not returned by the unweening semi-blind over the way. Your friend with the glance of a hawk, who describes you half a mile off, and expects a return in kind for his nods and becks and wreathed smiles, receives incredulously the next time you meet your deprecations of intentional disrespect, and your meek suggestion that on him who enjoys the proud prerogative of perfect vision — not the poor victim of nature's unkindness — rests by right the blame of the seeming cut direct. Upstart persons of defective breeding, struggling with painful jealousy up the steps of social rank or prestige — and such are invariably the very keenest-sighted of persons — are constitutionally the most touchy upon this point, and are always on the look-out for what they regard as studied and intentional slights. Upon people better bred, or by nature less crabbed and suspicious, the effect of being perpetually ignored, passed by, or seemingly slighted can hardly be other than to estrange or to discourage them in their friendly or social advances. You make an acquaintance, say, at dinner, get on famously together, swear eternal friendship, and next day your new friend gives you a deliberate go-by in the street, or stares you in the face across the drawing-room at your club, without a sign of recognition. Who can well help feeling, under that fixed and glassy gaze, the kindliness of his nature rapidly turn to ice? Who has not felt, at a dinner-table even, the numbing, freezing influence where a single gorgon or spectre, if not more, sits, so to say, statue-like, the soul to all appearance drawn into itself, dull to the nervous efforts of host or hostess, turning away just as you think you have caught a look to open a conversation withal? The very lover "sighing his soul into his lady's face" fails, with all his conscious glow of rapture and all his beseeching looks, to kindle one glance of intelligence, or to catch one responsive or sympathetic sign. He feels himself gradually, but almost inevitably, turned to stone.

But if short-sighted people are a source of perpetual misery and depression to others, who can express half the suffering or privation to which they are themselves a prey? The aids of science are of course, it will be said, at hand to mitigate much of what nature has so cruelly inflicted upon them. But there must have been myopes in ages when lenses were unknown, nor is it at any time in the power of science or

art to provide a full equivalent for what is lost by the naturally dim sighted. The use of the convex lens as a burning-glass, referred to by Aristophanes, leads us, indeed, to believe that its optical value—and, if so, possibly that of the concave lens also—can scarcely have passed unknown. Nero is said to have looked on at the games through an emerald, and there have been lenses of crystal found, at Nineveh and elsewhere, which make it not unlikely that short-sight had its artificial aids at times very remote from our own. But the luxury must have been at all events a rare one. To those who, from whatever cause, are not in the habit of using glasses, the defect must be perpetually bringing itself home. We would not dwell over much upon the amount of charm they must lose in nature or every-day life. Nature has manifold compensations, and much that they lose may be made up by much that they are spared. The softened and misty beauty which the landscape presents to near sight, reflected as it is in the art of Turner, is not perhaps inferior to the crisp and clear definition of form which nature assumes upon the canvas of the eagle-eyed *præ* Raffaellite. Short-sight involves untold nervous suffering. It has its correlatives in diffidence of gait and hesitancy of address. There is a painful sense of awkwardness in entering a room where ten to one you walk up to anybody rather than the right person. And there is an unfair strain upon the memory as you come in the street upon keen-sighted friends who have minutes before them to call to mind who and what you are, and who burst upon you without your having a second to think of their names and all about them. Such, moreover, is the close correlation between all organ and function that the very talk will be found to have a defective quality due in a measure to shortness of sight. Speech is largely founded upon mere imitation, the action of the lips being formed by following the motions which the eye beholds in others. From vague and indistinct perception of such motions there grows a tendency to clipping the speech, to muffled, ill-formed, or mumbling sounds. For the public speaker the eye, it is well known, is an organ of scarcely less magic than the tongue. With it he holds the audience in his grasp. Unless he can make out singly the very eyeballs before him, many an orator has declared, his whole art seems to him useless. For merely pitching the voice, and adapting it to the room or space, the estimate of sight is of high importance. And for chaining or entrancing even a single

listener, who does not call to mind the spell which the Ancient Mariner was able to throw into his "glittering eye"?

Apart, however, from either the psychological or the social bearings of short-sight, there is a view of the matter in which it rises to political importance. At a time when nothing can get a hearing which is not somehow connected with war, and everything must be looked at, so to say, through blood-red spectacles, we may trust perhaps to this consideration as in some sort promising us a claim upon the attention of our readers. In a recent number of the Paris *Revue des Cours scientifiques* we have met with some very curious statistics furnished by M. Giraud-Teulon to the *Gazette hebdomadaire*. These facts and figures go into the relative prevalence of short-sight in the various nations of Europe, with its consequent effect upon fitness for military service. Twelve years ago it was made clear by the statistical researches of Donders of Utrecht that this defect was peculiar to the wealthy and educated classes. Half a century back, indeed, Ware had announced in this country much the same result. Inquiring of three surgeons of the Foot Guards the number of cases of this kind among 10,000 men, he learnt that short-sight was all but unknown in the British Army. Not half a dozen cases had been returned in twenty years. Nor had more than a dozen recruits been rejected for this cause. At the Military School, Chelsea, only three instances have been found among 1,300 boys. At Oxford there were as many as 32 out of 127. In France M. Giraud-Teulon ascertained that not above 4 or 5 in 1,000 recruits were set aside as myopes in the country. In the towns the figures were considerably higher. Dr. Hermann Cohn, of Breslau, having with infinite pains examined the eyes of 10,000 students in the different Universities of his country, met with no less than 1,004 myopes, more than a tenth. His principal results are embodied in the following propositions:—

1. There are no schools absolutely free from short-sight.
2. Short-sight is relatively less prevalent in village schools.
3. There are eight times more short-sighted pupils in town schools (1·4 in 100).
4. In "primary" town schools the short-sighted are four or five times more numerous than in rural schools (11·4 in 100.)
5. In urban schools the degree of short-sight increases with the grade of the school. "Primary schools, 6·7; middle schools, 10·3; normal schools, 19·7; gymnasiums, universities, 26·2." At a recent examination

of the French Ecole Polytechnique the number was returned as 35 in 100. In town schools the failing of short-sight was traced in a most regular way two years at a time. None were found myope who had not been a half-year at school. Short-sight is essentially artificial. It is the penalty of learning. It follows very closely upon the amount of education by books. The Germans have the shortest sight of all nations, aggravated as the defect is by the small thin type and coarse paper in popular use. Convexity of the lens of the eye is induced by the habitual adjustment to a near focus. Amongst sailors, on the contrary, whose eyes are directed so much towards the horizon, sight is generally found the longest. Is then, asks the writer of *La Myopie au point de vue militaire*, the French rule to be followed which makes short-sight a ground of rejection from the army? Or is the German economy more to be commended which observes no such principle of exclusion? For the staff service the rule has been relaxed by the French military authorities. The flower of the Polytechnic School would otherwise have been thrown aside. "L'école ne pouvait fournir des savants sans fabriquer en même temps des myopes." In book-taught Germany the relaxation had of necessity to be even wider. There was no other way of filling the ranks. "Le chiffre de myopes exempts eût quasi forcé de prendre les boîtes et les manchots." A pair of spectacles in the ranks causes no greater surprise with the Germans than a pipe does. And how much more does the rule apply to the reserves or civilian forces — the Landwehr and Landsturm — whose masses supplement the hosts of the regular army? But for the spectacle rank and file where would have been the million of men whom Moltke undertook to place within a fortnight upon the Rhine? M. Giraud-Teulon has more than one suggestion to make towards utilizing the short-sighted material excluded by the existing rule of the French service. The limit of

vision fixed by the old *régime* is that of No. 5 of the optician's scale. This figure seems to him dangerously lax, if artificial aids are excluded from the ranks. A sentinel or vedette with a sight even as short as 1·8 would, he considers, be exposed to perilous surprises, &c. Were the German example followed by the admission of lunettes, a myope armed with No. 8 would be of very efficient service; still more those of less defective sight. A better instructed class of recruits would also be made available. Nor would this French writer restrict such material to services of the auxiliary or non-combative kind, such as writing, keeping accounts, &c. Such a rule would, he believes, be not less cruel than wasteful. He is full of hope as well as of pity for the poor purblind. Put him to active outside work instead of indoor clerical duty, and the focus of his sight will by degrees gain distance. His power of vision will improve. This is a comfort of the same nature as that which is proverbially held out to all short-sighted persons — namely, the fact, not only that short sight is usually strong sight, but that the convexity of the cornea diminishes with age. We are not very confident of its working fast enough to affect the usefulness of the soldier within the military age. Nor are we prepared to move the wrath of adjutants or martinets by advocating the admission of spectacles among our rank and file on parade. In our own service efficiency of sight is one of the manifold qualifications in the recruit which have to be attested, in every branch alike, by the medical inspector. As regards the officers, a rule which would have set aside Sir Charles Napier amongst ourselves, no less than General Moltke amongst the Germans, is of course simply out of the question. With the spread of education by book to lower and lower strata of the social mass we may have, however, some day to face in real earnest some such practical solution of the problem how to utilize short-sight in war as the necessity of the case has forced upon the Germans.

Mr. GEORGE M. BAKER, of America, proposes to add another to the reputations rescued from the malignant obloquy of history. He is lecturing before audiences of his countrywomen and countrymen in vindication of Xantippe. The reporters differ as to his theory, one party inferring it to be that the representative virago was originally of a sweet disposition, which was soured by the brutal conduct of Socrates; the

others that she was never soured at all, but was altogether amiable and estimable. But all our American cousins are not engaged with the whitewash brush. Mr. Pollard, a Virginian, attacks the reputation of the famous Virginian orator of revolutionary times, Patrick Henry, and declares (in the *Galaxy*) that his (Henry's) orations were really William Wirt's.

Fall Mall Gazette.

From The Pall Mall Gazette.
HOW TO FIGHT THE PRUSSIANS.

AFTER the Italian war of 1859, when the French military power was at its height, Prince Frederick Charles of Prussia, the same who is now investing Bazaine's army in Metz, wrote a pamphlet, "How to Fight the French." At the present day, when the immense military strength of Germany, organized upon the Prussian system, is carrying everything before it, people begin to ask themselves who is in future, and how, to fight the Prussians. And when a war in which Germany, at the beginning, merely defended her own against French *chauvinisme*, appears to be changing gradually, but surely, into a war in the interests of a new German *chauvinisme*, it is worth while to consider that question.

"Providence is always on the side of the big battalions," was a favorite way of the Napoleon's to explain how battles were won and lost. It is upon this principle that Prussia has acted. She took care to have the "big battalions." When, in 1807, Napoleon forbade her to have an army of more than 40,000 men, she dismissed her recruits after six months' drill, and put fresh men in their places; and in 1813 she was able to field 250,000 soldiers out of a population of four-and-a-half millions. Afterwards, this same principle of short service with the regiment and long liability for service in the reserve was more fully developed, and, besides, brought into harmony with the necessities of an absolute monarchy. The men were kept from two to three years with the regiment, so as to not only drill them well, but also to break them in completely to habits of unconditional obedience.

Now here is the weak point in the Prussian system. It has to reconcile two different and finally incompatible objects. On the one hand it pretends to make every able-bodied man a soldier; to have a standing army for no other object than to be a school in which the citizens learn the use of arms, and a nucleus round which they rally in time of attack from abroad. So far the system is purely defensive. But, on the other hand, this same army is to be the armed support, the mainstay, of a quasi-absolute Government; and for this purpose the school of arms for the citizens has to be changed into a school of absolute obedience to superiors, and of royalist sentiments. This can be done by length of service only. Here the incompatibility comes out. Foreign defensive policy requires the drilling of many men for a short period, so as to have in the reserve large numbers in case of foreign attack; and home policy requires

the breaking in of a limited number of men for a longer period, so as to have a trustworthy army in case of internal revolt. The quasi-absolute monarchy chose an intermediate way. It kept the men full three years under arms, and limited the number of recruits according to its financial means. The boasted universal liability to military service does not in reality exist. It is changed into a conscription distinguished from that of other countries merely by being more oppressive. It costs more money, it takes more men, and it extends their liability to be called out to a far longer period than is the case anywhere else. And, at the same time, what originally was a people armed for their own defence now becomes changed into a ready and handy army of attack, into an instrument of Cabinet policy.

In 1861 Prussia had a population of rather more than eighteen millions, and every year 227,000 young men became liable to military service by attaining the age of twenty. Out of these, fully one-half were bodily fit for service—if not there and then, at least a couple of years afterwards. Well, instead of 114,000 recruits, not more than 63,000 were annually placed in the ranks; so that very near one-half of the able-bodied male population were excluded from instruction in the use of arms. Whoever has been in Prussia during a war must have been struck by the enormous number of strong hearty fellows between twenty and thirty-two who remained quietly at home. The state of "suspended animation" which special correspondents have noticed in Prussia during the war exists in their own imagination only.

Since 1866 the number of annual recruits in the North-German Confederation has not exceeded 93,000, on a population of 30,000,000. If the full complement of able-bodied young men—even after the strictest medical scrutiny—were taken, it would amount to at least 170,000. Dynastic necessities on the one side, financial necessities on the other, determined this limitation of the number of recruits. The army remained a handy instrument for absolutist purpose at home for Cabinet wars abroad; but as to the full strength of the nation for defence, that was not nearly made available.

Still this system maintained an immense superiority over the old-fashioned cadre system of the other great continental armies. As compared to them, Prussia drew twice the number of soldiers from the same number of population. And she has managed to make them good soldiers too, thanks to

a system which exhausted her resources, and which would never have been endured by the people had it not been for Louis Napoleon's constant feelers for the Rhine frontier, and for the aspirations towards German unity of which this army was instinctively felt to be the necessary instrument. The Rhine and the unity of Germany once secure, that army system must become intolerable.

Here we have the answer to the question, How to fight the Prussians. If a nation equally populous, equally intelligent, equally brave, equally civilized, were to carry out in reality that which in Prussia is done on paper only, to make a soldier of every able-bodied citizen; if that nation limited the actual time of service in peace and for drill to what is really required for the purpose and no more; if it kept up the organization for the war establishment in the same effective way as Prussia has lately done — then, we say, that nation would possess the same immense advantage over Prussianized Germany that Prussianized Germany has proved herself to possess over France in this present war. According to first-rate Prussian authorities (including General Von Roon, the Minister of War) two years' service is quite sufficient to turn a lout into a good soldier. With the permission of her Majesty's martinet, we should even be inclined to say that for the mass of the recruits eighteen months — two summers and one winter — would suffice. But the exact length of service is a secondary question. The Prussians, as we have seen, obtained excellent results after six months' service, and with men who had but just ceased to be serfs. The main point is, that the principle of universal liability to service be really carried out.

And if the war be continued to that bitter end for which the German Philistines are now shouting, the dismemberment of France, we may depend upon it that the French *will* adopt that principle. They have been so far a warlike but not a military nation. They have hated service in that army of theirs which was established on the cadre system, with long service and few drilled reserves. They will be quite willing to serve in an army with short service and long liability on the reserve, and they will do even more, if that will enable them to wipe out the insult and restore the integrity of France. And then, the "big battalions" will be on the side of France, and the effect they produce will be the same as in this war, unless Germany adopt the same system. But there will be this difference. As the Prussian landwehr system was progress com-

pared with the French cadre system, because it reduced the time of service and increased the number of men capable to defend their country, so will this new system of really universal liability to serve be an advance upon the Prussian system. Armaments for war will become more colossal, but peace-armies will become smaller; the citizens of a country will, every one of them, have to fight out the quarrels of their rulers in person and no longer by substitute; defence will become stronger, and attack will become more difficult; and the very extension of armies will finally turn out to be a reduction of expense and a guarantee of peace.

From The Pall Mall Gazette.
ROME AND ALSACE.

By the occupation of the territory composing the Roman State the political consolidation of Italy is completed. It would be idle to assert that all the steps by which this great achievement has been carried through have been in harmony with morality as understood between Government and Government; yet the self-respect of the Italian people has been preserved by their strong sense of a higher right entitling those who have acted in their name to do all they have done. The consciousness of a unity in the Italian people has produced a conviction of their moral right to form one political aggregate, and to give to it such constitutional forms as the majority of Italians should prefer. No inquiry can be more important for various reasons at this moment than an inquiry into the source of this overpowering consciousness of unity. It has assuredly not grown out of common political history, for, not to speak of modern times, there never was a period at which Italy was a country with Rome for her capital, for Rome was always the capital either of less or more of Italy. Nor has this remarkable feeling arisen from unity of race. Nothing is more certain than that the Italians are not of the same race. Many of them are doubtless descended from races akin to the citizens of the city which conquered the world, but vast numbers could only trace their pedigree to the great gangs of slaves swept together from the corners of the earth, who filled the households or tilled the gigantic estates of the wealthy Romans. The population of the North of Italy is mainly Celtic, that of the extreme south has in it Greek, Arabian, and Norman ingredients; and everywhere at the top there must

be a thick stratum of German origin. The true unity of Italy is the result of the unity of language; it is comparatively modern and consists in a common mental history. Italian learning, Italian science, Italian poetry, Italian painting, Italian music, and Italian architecture have been practically common for many centuries to all the countries now forming the kingdom, and out of these has been shaped the unity of the Italian people.

It is worth taking the real origin of Italian unity into consideration when we are asked to assent to that German claim to Alsace and Lorraine, which is at this moment being settled in one sense or the other. That, too, is a claim alleged to be morally founded on unity. The unity is not of language, which is allowed to have degenerated into a patois in these provinces; it is a unity of race, supposed to be shown by a former common tongue. What is really meant by unity of race beyond a certain community of language is not the less indistinctly understood because the words are now-a-days common in men's mouths; those who talk with emphasis about races and nationalities would probably hesitate to lay down that all whom they include under a particular name have sprung from the loins of the same savage patriarch. What really is important is the question whether unity of race or language has produced community of mental history. Now, it is certain that Alsace and Lorraine have had no part or share in the intellectual development of Germany. The Reformation was the great intellectual achievement of Germany, but Alsace and Lorraine have long been fervently Catholic. German literature only came into existence when they were French, and not long before the events occurred which made them intensely and fanatically proud of being French. The mental history of these provinces is in fact French, and it is now too late to make it otherwise. They have already given several great names to French art and literature, and their admiration is commanded exclusively by French models. As for the political history of the population, it is of even later origin than their intellectual history, for it began in 1789. Their power of speaking a broken German does not produce sympathy with a single German idea.

Considering what the exploits of German generals have been, it would be highly presumptuous to question their opinion that the annexation of these provinces would give them a nearly impregnable military frontier; and we are not satisfied that M. Renan is right in asserting that France, if she retained Alsace and Lorraine, would

easily reconcile herself to Germany, while she would never forgive their loss. But there is one aspect of the subject on which English authority is better than any other. Englishmen may claim to be heard by Germans when they say that the possession of these provinces would be a very serious misfortune to those liberties which Germany appears to be now sure of obtaining. The Germans seem to have persuaded themselves that they can re-Germanize Alsace and Lorraine by careful administration. Yet this process has been going on for long years in the Austrian States, and the present dangers of the Austrian Empire arise from the fact that the attempts of the German bureaucracy to produce a uniform political whole have failed miserably even in those Slavonic provinces which have no mental history at all and little more than a pretence of political history. Not even the political institutions of Hungary seem to us likely to prove material so stubborn and unmanageable as the French structure of society in Alsace and Lorraine. We cannot doubt that the new provinces would have to be governed as Posen is governed, only under vastly greater difficulties. Now we Englishmen have a world of experience on this subject from our connection with Ireland. We shall never give it up so long as we exist as a nation, and, indeed, we should cease to be a nation if we lost it. But at the same time we cannot help feeling pity for the political rashness of a nation which should take to itself a sort of Ireland, save under pressure of overwhelming political necessity. It is not that nowadays we find it difficult to be just or generous to Ireland; the misfortune which it entails upon us is loss of confidence in our own political, social, and economical ideas. But a nation like ours, old in freedom, can find its most cherished principles falsified in a part of its territory, and yet not suffer half the injury which a similar miscarriage would occasion to a community which is taking its first steps in political liberty.

Nor need we hesitate to say that those difficulties which we trust we have nearly overcome in our government of Ireland would be aggravated tenfold in the case of the new German provinces. The great obstacle to success in administering Alsace and Lorraine, if they remained (as we think they would) permanently discontented, would be the proximity of France. France may be immensely weakened and impoverished; but nothing will make Frenchmen cease to be a great literary people. You may no longer fear her armies, and yet her wit and her passion may be to the last de-

gree formidable. It is hard to govern a thoroughly discontented dependency under any circumstances, but infinitely harder to govern it under the eyes of a bitterly critical neighbour who has the ear of the world. However much we may recognize the great qualities of the German people, we cannot but see that there are many German peculiarities which a thoroughly unfriendly censor may succeed in so describing as to make them contemptible or hateful. Neither the kings nor the nobles nor the bureaucracy nor the literary men nor the middle class are exempt from weaknesses which it would cost little to French criticism to make the sport of the world. But the great weapon of French literature would be the aggravation of actually existing discontent. In these days of universal publicity there is no nation which does not suffer extreme discomfort from the knowledge that she is suspected of oppressing a province or a dependency. Great Britain is singularly callous to foreign opinion, and yet the approval of the "intelligent foreigner" was promised us as the chief reward of recent Irish legislation of which a good deal was not to our national taste. Russia takes manifest pains to seem unconcerned as to what Europe may think of her administration of Poland; yet the signs of *malaise* may be clearly read in the affected nationalism of her literature and her press. But discontents which are merely an annoyance to a despotically governed country, or to a country of assured freedom, may prove the cruellest of trials in the infancy of free government.

From The Anglo-American Times.
WHAT THE GERMANS LOSE.

THE Berlin *Börzen Zeitung* says "the present war has shown anew how great is the advantage which the German army possesses above all others by means of the volunteers who serve for one year, as not only does the presence of some 40,000 or 50,000 young men of high culture tend to raise the tone of the army, but they furnish an inexhaustible supply of officers. Besides these, there are at least 100,000 young men in the army who have received a liberal education, although they have been unable to pass the examination which would have entitled them to serve only for one year, and they form the cement which binds Prussian and North German troops together." The officers, although indistinguishable by dress from the men, have suffered enor-

mously in proportion, which simply shows the freedom with which they exposed themselves in leading. Were the losses in the ranks analyzed, it would be found that they were heavy in proportion to education and intelligence, those excelling in these qualifications most closely following the officers. Hence the argument that among the best men of Germany the loss has been heaviest, and the sequence is clear that the country in the future must feel it severely. To understand the full effect, the Prussian system should be known, which freely uses in all grades men occupying civil posts requiring training, taken from enterprises, firms, and industrial occupations necessitating a finished apprenticeship and education; and these are the men who have been buried in thousands around Metz and Sedan. But let us go down, and glance at what Prussia's loss is in the rest. There is to be found not only her intellect, her education, her high professional and mechanical training, but her bone and sinew. The men sent to the front are physically the most powerful, and in the flower of their age. The mode adopted is not to marry until they have served their military term; and in the ranks may be seen thousands of the lately married. In their loss Germany will be struck a severe blow, and, after the Fatherland, the loss will fall on the United States. We may never ascertain accurately — indeed, never can — the blow thus dealt to Germany, but it will be very severe, and felt for many years to come. It has become a saying in other countries, more especially the Anglo-Saxon nations, that their *mauvais sujets* are food for powder. The Germans, however, have grouped the best in the land, physically, morally, and mentally, as their food for powder; nor have they confined themselves to this sacrifice of the flower of the nation, but have added to the sacrifice through other means. The higher the mental training, the more careful the nurture, the less is the individual fitted for the physical exercise of marching with heavy packs, for sustaining that strain on bad and insufficient food, and enduring the hardship of sleeping on the bare ground in heavy rain. The agricultural labourer will survive, while he who studied for years the most abstruse sciences will succumb; and it is probable that Germany will lose intellects which would have added to her fame, and thrown a light to lighten the world, by a bullet through the brain, or succumbing under dysentery and disease. There is something in such a warfare as is waged by Germany most painful in its consequences to the nation. But the shades are lost in

the glare of this wonderfully successful war, to come out all the darker when the national eyes cease to be dazzled, and become accustomed to the unusual glitter. Then the truth will come home that the price has been heavy, not merely in the family ties rent asunder, in the prosperous thousands consigned to indigence, in the mourning and the tears, which, for years, will continue to be shed, but in the marked check to the material and scientific progress of the country. The most intricate of all machinery is the working of the great community we call a nation. Derangements, even the most trivial, scatter ruin, and are not easily repaired. Of all derangements war is the worst, not only to the invaded, but to the invaders, more especially when organized as is the army of Germany. The national life is temporarily stopped; the Germans imagine to go on as before when again set in motion; but, unless we mistake, they will not find it so. There are rising manufactures which will never recover the blow; there are trades diverted which may, if the war be prolonged, never get back

into the old channel; there are enterprises, all the clues to which were in hands now buried in the soil of France; and the aggregate of these private failures caused by the war will make up a great national loss. It will be on the return of the victorious army that Germany will begin to realize what the cost has been. Thousands will come back to find their business gone, and hundreds of enterprises will languish, or fail, for lack of the directing brain. In every land the rush of Germans to the war has left a void in the places made by years of toil, to fill up as a sinking ship is filled by the sea, and those places may know the Germans no more. Painful as this is to contemplate, it is not without its bright side; for it will impress all its bitterness on the most thinking of nations, and give them a horror of war. While teaching France what a vanity military glory is, by the very act of acquiring that military glory herself, Germany will learn that it is only gained by drops wrung from the heart of a nation—that, next to the vanquished, the field of Victory is the saddest sight to the conqueror,

It was well said by Lord Russell that a proverb was "the experience of many and the wit of one." His lordship might have added that the wit of one often adds to the sad experience of the many, for proverbs are too often exaggerated to laws and made the excuses of the most heinous crimes. The *Times*, for instance, speaking of the atrocities alleged to have been committed by the Bavarians at the village of Bazeilles, says:—"We may as well hope that wars will altogether cease to be made as that they will ever be made with rose-water." We all know that wars are not made with rose-water; nor was chivalry thus manufactured, yet it would not have roasted women and children alive and pushed them back into the fire with bayonets, or tied the hands of women and shot them; and these are the atrocities alleged to have been committed by the Bavarian troops. The allegation may be untrue, but still it has been made, and should either be contradicted or those who perpetrated these barbarities should receive the punishment which is their due. War is and must be horrible, but the rose-water saying should be used with extreme caution. There is a passage in the "Reflector," published in the year 1750, well worth attention at the present moment. "The ancients," says the "Reflector," "made as unjust wars as the moderns, the differences consisting in the manner of conducting them. The ancients bluntly entered upon their unjust wars without pretext, pre-

amble, or colour assigned; but the politer moderns first give notice by manifesto, protest their own innocence, and show the necessity which, against their will, compels them to arms. Nay, we sometimes beg the Divine permission to ravage a country. This appears by the days set apart to implore success to our arms, and the numerous modern declarations of war, wherein the Almighty is called to witness that force is used unwillingly, and that the contending Powers are heartily sorry they are obliged to disturb the public peace. If Alexander the Great had thus called Jupiter to witness how unwilling his pacific temper was to disturb the peace of the world, and declared his hearty sorrow to be forced to take up arms against his brother Darius, what would the philosophers of those times—what would Aristotle have thought of such a manifesto?

Pall Mall Gazette.

THERE is good report of the progress of ipecacuanha cultivation in India, where it is found so valuable in that prevalent disease, dysentery. Since Dr. John Murray obtained for it the notice of the Indian Government, it has been successfully planted in the Neilgherries and other of our hill settlements, and in the plains. It has done well even in Calcutta. Nature.